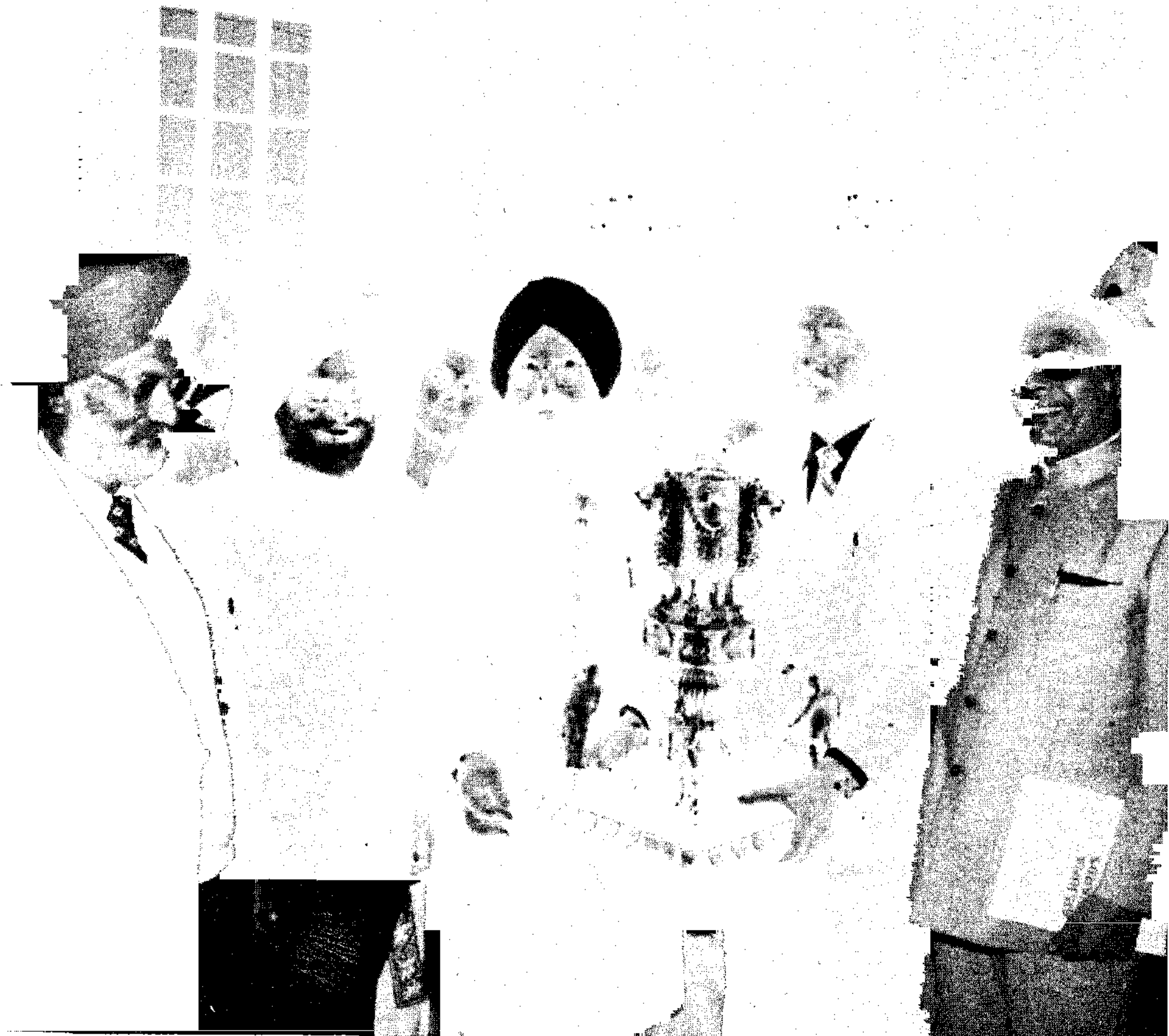


University News



Giani Zail Singh, President of India, presenting the Maulana Abul Kalam Azad Trophy to Guru Nanak Dev University. Seen on his right is Dr. S.S. Bal, V.C. and on his left are Dr. M.S. Sandhu, Director of Physical Education and Dr. Jagdish Narain, Secretary, AIU.

JADAVPUR UNIVERSITY

CALCUTTA-700 032

Employment Notification No. A2/Project/1/86

Dated : February 18, 1986

Applications are invited for the following posts attached to the "School of Energy Studies" of the University, sponsored by the Ministry of Education, Government of India. The posts are temporary for the present and are likely to continue.

1. Reader — One post

Scale of Pay—Rs. 1200-50-1300-60-1900/-

Essential Qualifications

For Engineering degree holders

Good academic record with a Doctor's degree in a relevant field. About 5 years' experience of teaching and/or research and development in the field of New Energy Sources.

Provided further that candidates not possessing Ph.D. may be considered if they have to their credit equivalent research published work or design/development work of a high order either in the Institution or in an Industry.

OR

In the case of persons to be recruited from industry or professional fields, candidate should possess good academic record with recognised professional work of about 7 years which should include innovation and/or research and development.

For Arts and Science degree holders :

Good academic record with a doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research or (ii) innovation in teaching methods or (iii) production of teaching methods.

About five years' experience of teaching and/or research provided that at least three of these years were as Lecturer or in an equivalent position.

This condition may be relaxed in the case of candidate with outstanding record of teaching/research.

2. Lecturer—one post

Scale of Pay—Rs. 700-40-1100-50-1600/-

Essential Qualifications

For Engineering degree holders

- (i) Master's degree in appropriate field in Engineering/Technology;
- (ii) Good academic record with a Bachelor's degree in Engineering/Technology. First Class at Bachelor's degree and/or Master's degree level;
- (iii) One year's Research/Design/Development work in the field of New Energy sources.

Having regard to the requirements of emerging fields of Engineering and of developing interdisciplinary programmes, the requirements of Engineering/Technology degrees may be waived in the cases of otherwise well qualified candidates.

Provided further that if a candidate does not possess professional experience or a person possessing such experience is not found suitable, the person appointed

will be required to obtain desired professional experience within a period of eight years of his appointment failing which he will not be able to earn future increments, until he fulfils these requirements.

Wherever candidates with M.Tech./M.E. qualifications are not available or M.Tech./M.E. candidates are not found suitable for appointment, the essential qualification may be relaxed and the institution may appoint First Class Engineering Graduates against the post of Lecturers. Such relaxation will, however, be subject to the condition that the candidates concerned shall have to obtain the M.Tech./M.E. degree within a period of five years. Those candidates who fail to obtain the M.Tech./M.E. degree within the stipulated period of five years shall not be entitled for drawing their increments due unless they acquire the prescribed qualification.

For Arts and Science degree holders :

Qualifications : Essential

- (a) A Doctor's degree or research work of an equally high standard; and
- (b) Good academic record with at least second class Master's degree in a relevant subject from an Indian University or an equivalent degree from a foreign university.

Having regard to the need for developing interdisciplinary programmes, the degrees in (a) and (b) above may be in relevant subjects.

Provided that if the selection committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record, (weightage being given to M.Phil. or equivalent degree or research work of quality) may be appointed provided he has done research work for at least two years or has practical experience in a research laboratory/organisation on the condition that he will have to obtain a Doctor's degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increment until he fulfils these requirements.

EXPLANATION

For determining "good academic record" the following criteria shall be adopted :

- (i) A candidate holding a Ph.D. degree should possess at least a second class Master's degree; or
- (ii) A candidate without a Ph.D. degree should possess a high second class Master's degree and second class in the Bachelor's degree; or
- (iii) A candidate not possessing Ph.D. degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree.

Desirable

For both the posts : Teaching experience in a University, Guidance of research, Publication of high quality.

Last date of receiving application is **March 15, 1986.**

Application forms are obtainable from the University Office during working hours on payment of Rs. 2/- or by post on payment of Rs. 3/- including postages. No travelling allowance is admissible to candidates called for interview. Higher initial salary may be given to really deserving candidates. Those who are in employment should submit their applications through proper channel. Separate sets of application are to be submitted for each post. Choice of Selection Committee will not necessarily be confined to applicant only. Canvassing in any form will disqualify a candidate.

REGISTRAR

JADAVPUR UNIVERSITY

CALCUTTA-32

Employment Notification No. A2/C/5/85

Dated : February 24, 1986

The University invites applications in the prescribed form for the following post :

1. Professor of Production Engineering —One Post.

Scale of Pay : Rs. 1500-60-1800-100-2000-125/2-2500/-

Qualifications

Essential : An eminent scholar with published work of high quality actively engaged in research. Ten years' experience of teaching and/or research. Experience of guiding research at doctoral level.

OR

An outstanding Engineer/Technologist with established reputation who has made significant contribution to knowledge.

Desirable : (i) Membership of learned Societies.

(ii) Experience in setting up of Laboratories.

Specialisation : CAM, CNC, DNC & ROBOTICS.

Last date of receiving application is **March 20, 1986.**

Application forms are obtainable from the University Office during working hours on payment of Rs. 2/- or by post on payment of Rs. 3/- inclusive of postage. Higher initial salary may be given to really deserving candidate. Those who are in employment should submit their applications through proper channel. Choice of Appointment Committee will not necessarily be confined to applicants only. Canvassing in any form will disqualify a candidate.

REGISTRAR

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Editor :
M.S. RAMAMURTHY

In Celebration of Excellence

Sportsmen and sportswomen of Guru Nanak Dev University scored a rare distinction when they annexed the coveted Maulana Abul Kalam Azad Trophy for seventh year in succession. This highest sports award instituted by the Department of Education of the Ministry of Human Resource Development, Government of India, is made each year to the University which secured maximum points in the Inter-University, National and International competitions. The President of India makes the presentation to the Vice-Chancellor of the University at a special investiture ceremony.

Guru Nanak Dev University fielded, during the current year, eighteen teams for men and eleven teams for women in the Inter-University competitions. The university won nine All India Inter-University Tournaments, was runners-up in four competitions and secured third position in another four. It also won four North Zone competitions. Two athletes of the university participated in the World Universiade at Kobe, Japan. One girl footballer was a member of the Indian Women's Football Team that won silver medal at the International Women's Football Tournament. A wrestler of the university was declared Most Strong Wrestler of the World under 18 years in the Kaide-Azam International Championship. Two girls from the university attended Basketball coaching camps for the Indian Women's Basketball Team for the International Basketball Tournament.

As many as 70 students of the university participated in the National Championships in various games and sports. This is the highest number of players from a single university to represent State teams in the National Championships. Ten Hockey girls won gold medal in the National Games, 1985. Another 11 won silver medal in the Senior National Women's Hockey Championships. Five girl cricketers of the university won gold medal in the Sub-Junior National Cricket Tournament while another 14 participated in the Senior National Women's Cricket Tournament on behalf of the Punjab State. The only wrestler who won a gold medal in the National Games 1985 again belonged to this university. More than 80 outstanding sportsmen and sportswomen of the university were invited by the Association of Indian Universities for selection of combined universities' teams in various games and sports. This again is the largest number of players invited by the Association from any single university. The list is indeed endless.

The consistently excellent performance put up by the sportsmen and sportswomen of the Guru Nanak Dev University can be the pride of any institution. We share their joy in their hour of glory and wish them well in future. It will indeed be welcome if other universities/institutions emulate this fine example and attach as much importance to sports as the Guru Nanak Dev University. Maybe it is no accident that this is a relatively trouble free university in otherwise trouble torn State.

Conflict Management in Universities

—A Case Study

D. K. Sharma*

(Late) D. R. Darji**

In order to achieve some objectives which could not be achieved by individual efforts, organisations are established. Within the organisation different members perform various duties to make their own contribution towards the achievement of those objectives. Management of organisation covers a set of processes and activities to achieve organisational targets through optimum utilisation of available resources. Management includes entire process of planning, policy-making, co-ordination of activities, maintaining moral and discipline so as to achieve best possible results. Administrative management or administration is chiefly related to decision-making or policy decisions, changing the decisions whenever required within the broad outline of organisational targets, preparing plans and fixing standards of performance and verifying real performance of work with reference to effective utilisation of resources to achieve the objectives of the system. Just like industrial organisations, educational institutions also possess the basic characteristics of division of labour. Goals or targets are desired for future outputs towards which the behaviour of the members of the education system is directed in a desired manner. Clearly in the case of education system there is a lot of disharmony regarding the goals. Here one of the major management activities is related to the process of clarifying and selecting system objectives in relation to the environmental needs. The development of knowledge and culture depends wholly on a sound education system. A weak, backward and disorganised education system retards the progress and prosperity of nation. Education management plays a significant role in improving the quality of education. Emphasis, therefore, should be laid on scientific education management. Case studies of different universities with respect to education management are required to design a better education management system. In this paper a case study of one of the universities of India is presented from management point of view.

Objectives

- (i) To study the management of the University from

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the point of view of its governance by a study of the (a) Structure and powers of the Senate, (b) Structure and powers of the Syndicate, (c) Structure and powers of the Academic Council, and (d) Structure and powers of the Board of Studies.

- (ii) To study the role and powers of the Deans.

- (iii) To study the management of co-curricular activities.

- (iv) To study the departmental and hostel management of the University, and

- (v) To study critically various conflicting situations which create conflicts in the university management.

Design of the Study

1. Sample : Sample for conducting interviews consisted 70 faculty members of the University.

2. Tools of Research : Informal interview; Formal interview; Observation schedule; and Documentary records.

3. Variables and issues considered : Existing participation of various members in different decision-making bodies; structure and powers of different decision-making bodies; functioning of the departments; and situations of conflict management.

4. Procedure : Collection of material for tools; construction of tools; validation of tools; collection of information through interviews, observation schedule and documentary records. Data analysis i.e. analysis of information obtained through interview and documentary records.

Findings

The University under study had its inception as a college founded in mid-19th century with the object of imparting vocational education; the college gradually expanded and in due course, developed into a full fledged university. It is a fully residential university and possesses a special character. The Chancellor of the University is nominated by the State Government and holds office

for a period of three years. Next senior most officer is Vice-Chancellor who acts as principal executive and academic officer of the university. He is also an ex-officio member and chairman of the Syndicate and is entitled to be present and to speak at any meeting of any authority or body of the university. Registrar is a whole time officer of the university and acts as Secretary of the Senate and Syndicate. Two top most authorities of the university are Senate and Syndicate. Senate has got various types of members : Ex-Officio members—Chancellor, Vice-Chancellor, Registrar, Professors and Readers. Members nominated by State Government consisting of State Government officials, Central Government officers, Vice-Chancellors of other State universities. Four members elected by the State Legislative Assembly and two members elected by State Legislative Council and three representatives from amongst the lecturers not represented in the Senate in their own right. Senate has got the power to consider, amend and cancel regulations made by the Syndicate. It may consider and pass resolutions on matters affecting the welfare of the University, on the annual accounts and the financial statements. The Senate meets atleast once a year, though in special cases, Vice-Chancellor may convene a special meeting on receipt of a written requisition by atleast twenty of its members.

The Syndicate is the executive as well as the academic body of the university. It has got its members of various categories like Vice-Chancellor, Pro-Vice-Chancellor and all Professors of the university. Four Readers of the university are nominated by the Government and four other members are elected by the Syndicate. One President of a professional body is also a member. There are three more members of the Syndicate which are nominated by the State Government. Syndicate has got power subject to the approval of the State Government, in case of appointment of university staff, budget, extra-ordinary expenditure, extension of courses. The Syndicate shall normally meet atleast once in two months. In the absence of Vice-Chancellor, the Syndicate may elect a chairman for the meeting from among its members. Six members including the Chairman may form a quorum. The Registrar under, the direction of the Vice-Chancellor prepares the agenda for the meeting of the Syndicate.

The Academic Council is the academic body of the University that advises the Syndicate on all academic matters. Vice-Chancellor, Pro-Vice-Chancellor, Professors and Associate Professors of the University, Deans, two Directors of two local institutions, Librarian, Director of the Refresher Courses and the Registrar are members. Other members of the Academic Council

are—one Reader from each department by rotation in order of seniority (for one year) and four eminent persons co-opted by the Academic Council (for three years). Academic Council works as advisory body on the proposals submitted by the Board of Studies in regard to the courses of study and names of persons for inclusion in the panels of examiners.

Each department has a Board of Studies consisting of following members : (a) **Ex-Officio members** : Head of the Department (Chairman), Professors, Associate Professors, Readers, Lecturers of atleast three years standing in the university and an Assistant Registrar as Ex-Officio Secretary.

(b) **Other members** : Experts, not more than two, co-opted by the Chairman of the Board of Studies for a particular meeting. The Board of Studies initiate proposals regarding new courses of study and changes in the existing courses. It recommends suitable persons for the panel of examiners, and advises on any matter referred to it by the Senate, Syndicate or the Academic Council.

Hostel Management

Hostels of students are under the authority of Chief Warden. Each hostel is managed by a chief warden, a warden, and two assistant wardens. The Chief Warden, warden and assistant wardens are appointed by the Vice-Chancellor on the recommendation of the Dean of Students for a period of three years. For proper management of hostel life, a hostel council is constituted for each hostel with the Chief Warden as the Chairman. It looks after hostel, and the welfare, recreational, cultural and disciplinary activities entrusted to it. There is a co-ordinating committee of hostels, which forms rules and regulations of the hostels, and messes, and formulates common policies for their management, accounting, procurements and maintenance. The Dean of the Students is the Chairman of this committee.

Departmental Management

Each of the academic departments has a Head of the Department. He performs such duties as are assigned to him by the Vice-Chancellor. Head of the Department gets advice from Academic Programme Committee, Finance Purchase and Stores Committee and Departmental Administration Committee. These committees are constituted by the Head of the Department with the approval of the Vice-Chancellor.

Management of Activities

The University Sports Association, through its sports council, consisting of the staff advisers of various

games and activities manages and organises the different games and sports in the University campus. The Chief Sports Adviser is the over all incharge of the organisation and is assisted by the Deputy Chief Sports Adviser. The General Secretary (elected from amongst the various secretaries) is the Secretary of the sports council. The staff adviser of each game is responsible for the management of the game under his charge. All these officers are assigned duties by the Vice-Chancellor. The Secretary of each game, selected from amongst the students, assist the staff adviser in the general organisation and conduct of daily practice, matches and tournaments. The appointment of the Secretary and Joint Secretary is made by the Chief Sports Adviser on the basis of the recommendations of the committee consisting of Deputy Chief Sports Adviser, Staff Advisers, Past Secretary of the activity and the General Secretary.

University students club activities are organised by the undergraduate and postgraduate club councils consisting of the respective club advisers and club councillors, and councillors from the concerned hostels. Each club council elects its General Secretary from amongst the club councillors. The activities of the clubs are coordinated by a club council consisting of the Chief Club Adviser, the Club Advisers and the Club Councillors. The University Students Club provide facilities for billiards, indoor games, music, newspapers and magazines.

There is also a Cultural Society which organises cultural programmes. The activities of the society are managed by the Chief Adviser, Deputy Chief Adviser, Staff Advisers, Secretaries and Joint Secretaries. One of the Secretaries acts as the General Secretary.

Each department has got its own academic society having Head of the Department as patron and a staff adviser. Societies organise academic discussions, film shows, seminars and lectures. Students of the department form the general body and office bearers are elected from this general body.

Role and Powers of Deans

University has got a special post of Deans. Dean of Students, Dean of Finance and Planning and Dean of Research. Dean of Student looks after the student welfare affairs. Dean of Finance and Planning deals with the financial aspects of the university and its planning activities, whereas Dean of Research handles affairs related to research projects. University has introduced headship by rotation among the senior staff members.

Conflicts in the Management

Following conflicting situations were identified on the basis of observations and interviews with different

categories of the members of the system : (1) Central office and Department Heads, (2) Nomination to different posts by the Vice-Chancellor, (3) Powers of the Head of the Department in the Departmental management, (4) Non-teaching staff demands for various facilities, (5) Clashes between students and authorities in organising various programmes, (6) Appointment of examiners, (7) U.G.C. and financial planning of the University, (8) Teachers' Welfare and University authorities, (9) Management of hostels, (10) Seniority aspects of the staff members, (11) Work load of the staff members, (12) Job allotment to staff members, (13) Activities of power groups among the staff members, (14) Existence of pressure groups among the staff members, (15) Legal challenges in the courts regarding important decisions, (16) Disciplinary actions against students, (17) Disciplinary actions against members of the system, (18) Deputation aspects of faculty members, (19) Leave arrangements of faculty members, (20) Conduct of evaluation procedures (21) Overtime issues of non-teaching staff, (22) Management of information, (23) Human Relation aspects, (24) Financial aspects, and (25) Management of appointments.

Recommendations

Organizational health of the University should be improved. Poor organisational health may become one of the important causes for the failure of the system. University management should take proper measures to develop an effective communication system so that communication may flow both horizontally and vertically. Lack of communication between members and authorities spoils the University environment. More and more members should be involved in the various decision-making processes. Members of the University should have job satisfaction which will boost the morale of the staff members. Members of the university should feel that the organisation belongs to them and development of organisation will help their development. Programmes for leadership training should be organised for students and staff. Professional development of the faculty members should be given due consideration to have uptodate knowledge in various fields. Various important decision-making models could be applied at various levels for different decision situations with special reference to participatory decision-making model in day to day activities. Democratic values should be inculcated by various types of behaviour modification programmes which could be very useful in participatory management of the system by their members. Job analysis and job distribution should be done with due regard to accountability. Human relations aspect should be improved by various activities related to it. □

Examination Reforms at the South Gujarat University

(Smt.) D.S. Punalekar*

The South Gujarat University is conscious of the drawbacks of public examinations and has taken some steps from time to time to improve upon their examination system. Introduction of internal assessment at the undergraduate level, demanding two equivalent sets of question-papers from the paper-setters, introduction of viva-voce test at the postgraduate level, introduction of semester system at Engineering Faculty, etc. are some of the significant efforts made in this direction. The University has also carried out a research inquiry in the examination results. However, it was in the year 1976 that a systematic beginning was made in this area. A special reform cell was established with the financial assistance of the University Grants Commission (UGC) to carry out the reforms suggested in their monograph, 'Examination Reform—A Plan of Action'. The University strongly felt that these reforms could not be considered in isolation but must have close bearing upon teaching-learning process in order to improve the quality of education.

STATUS REPORT

The University concentrated on three major areas namely, Question Bank, Continuous Internal Assessment and Grading. What follows is a status report in these and other areas of examination reforms at the South Gujarat University.

(1) QUESTION BANK

This scheme has been implemented at the undergraduate level for First Year and Second Year Arts, Science and Commerce courses. It has also been extended to Third Year B.Sc. courses from the year 1984-85. The Examination Reform Unit has, however, recommended its extension to Third Year Arts and Commerce courses also so that one phase is completed at the undergraduate level.

(2) INTERNAL ASSESSMENT

The scheme of internal assessment has been implemented both at the undergraduate as well as the postgraduate levels. At the undergraduate level, in addition

to the written tests at the end of each term, tutorials, assignments and case studies have also been included for the purpose of evaluation. At the postgraduate level, the scheme has been implemented for M.A., M.Sc., M.Com., M.Ed., and M.R.S. degree courses.

For the purpose of continuous internal assessment, the entire syllabus of each subject has been divided into four almost equal time units. The assessment of students in each subject is made at the end of each time unit. In other words, the students are assessed for each paper in each subject four times a year. Methods used for assessment include (i) Test/Quiz, (ii) Practicals/Practical activity (iii) Tutorial/Seminar (iv) Term Paper/Assignment, and (v) Participation/Discussion. After the completion of four time units, the final report of assessment of the students is sent to the university in a prescribed form. The faculties concerned decide the appropriate weightage to be given to each of the above stated heads of assessment.

The weightage assigned to internal assessment in the final examination is 20%, both at the undergraduate and at the postgraduate levels. The Unit has, however, suggested gradual increase in the weightage from 20% to 30% at the postgraduate level. For M.B.A. and D.B.I.M. courses, the weightage for internal assessment is 33% and 30% respectively.

(3) GRADING

Grading system was implemented at the postgraduate level for some time. Though the system has been scrapped for the present, it has again been accepted in principle to reintroduce grading. The Unit proposes to carry out enough spade work before it is reimplemented. It is, however, felt that the agencies which provide employment to our students need to be educated about the system to make it acceptable and valid for their purposes.

(4) SEMESTER SYSTEM

Semester system is being successfully practised in the courses of M.B.A., M.R.S., Engineering and Diploma in Research Methodology in Social Sciences and B.Sc (Tech.).

*Co-ordinator, Examination Reform Unit,
South Gujarat University, Surat

(5) IMPROVEMENT IN QUESTION PAPERS

With the implementation of the question bank system at the undergraduate level in Arts, Science and Commerce courses, various types of questions, such as Essay-type, Short-answer type and Objective type have all been included in the question papers of these examinations. Care is also taken to represent the syllabus with the due weightage in the question paper. Further, the paper-setters are not prohibited from repeating the questions already asked in previous examinations. Multiple sets of question papers are demanded from paper-setters in order to avoid leakage and other malpractices.

Overall choice in the question paper is not given to students for answering questions but internal options are provided, if necessary. The examinations are held after fulfilling the minimum requirements laid down by the university with respect to syllabus, lectures, tutorials, practicals, etc.

(6) OBJECTIVE TYPE TESTING

Since 1984 examinations, the University has introduced objective type testing in the annual examinations. The candidates of First, Second and Third Year courses (excluding language courses) are given a separate question paper containing objective type items. The candidates have to answer these questions within first 30 minutes after which they are given question paper for full length answers.

(7) CENTRALISED ASSESSMENT

The centralised assessment has been followed for Second Year and Third Year B.A., B.Sc. and B.Com. examinations. The examiners are called at the University headquarters for assessment. Before the answer books are given to them the roll numbers are duly covered with non-transparent slips in order to maintain secrecy. This scheme has had very encouraging results.

(8) REASSESSMENT

The Reassessment scheme came into force with effect from the examinations conducted in March/April, 1979. Good many candidates take advantage of the scheme. This has had a good impact on the quality of the first assessment. This is done to ensure full justice to the students. It has been observed that quite a number of students who had been declared failed, after proper reassessment, were found to have passed. Student community has welcomed this measure.

(9) GRIEVANCE MACHINERY

For the undergraduate courses at First Year, Second Year and Third Year levels, there is a provision to apply reassessment in the internal evaluation in case the students feared victimization. Thus, all care is taken to see that students are not victimized or that they do not suffer due to erratic/casual assessment.

(10) SCHEME OF IMPROVEMENT OF PERFORMANCE

The scheme of improvement of performance has been made applicable to the Theory papers of Third Year B.A., B.Sc. and B.Com. examinations with effect from the examinations held in March/April, 1984. Only those candidates who have obtained atleast 45% of marks at the first attempt are eligible to opt for improvement of performance.

(11) CARRY OVER BENEFITS

Under this scheme Students can go from one year to the next year of the course even if they fail, but not in more than two papers. That is, students are allowed to carry a maximum of two papers from one year to the next, but not beyond that. In some cases, they are given the benefit of supplementary examinations also.

(12) IMPROVEMENT IN SYLLABI

In quite a few subjects, especially where the question banks have been developed, syllabus has been demarcated into various units alongwith their topicwise breakdown and proper numbering. In addition to these, wherever ambiguity is found, it is brought to the notice of the respective Board of studies, and this has helped in removing the ambiguities in many cases. In quite a few subjects, syllabi have been further modified and current topics added wherever found necessary.

(13) RESTRUCTURING OF COURSES

In all the faculties, courses have been restructured as per recommendations of the committee appointed for the purpose and the emphasis shifted to the integrated approach. Restructuring of courses is, however, a continuous process in meeting the changing needs and requirements of the society.

IMPACT OF EXAMINATION REFORMS

In the initial stages, there was quite a resistance to these reforms as these affected the entire system.

Traditions are so deep-rooted in the system that switching over to anything new is always resisted. This is because of inertia and any change demands hard work to meet the challenges. It also demands necessary changes in the existing administrative infrastructure, etc. However, with the passage of time, the initial opposition to these reforms has given way to their gradual acceptance. The impact of these reforms, though limited, has been quite perceptible.

QUESTION BANK

Question Bank has been accepted as a measure to improve the teaching-learning process. It has made the teachers conscious of different types of questions, their detailed format, construction, etc. It has also helped them frame better questions and set better question-papers. The teachers and paper-setters now think in terms of syllabus, its length and size and also devising new methods of teaching and evaluation.

INTERNAL ASSESSMENT

Continuous Internal Assessment introduced at the postgraduate level has resulted in improving study habits of students. It has also made them regular in attendance and studies. Students have realised the importance of hard work. The scheme has also helped in increasing interaction between the teachers and the students. To ensure effective implementation of the scheme it should be reviewed from time to time and modified wherever necessary.

There is a need to put faith in teachers and entrust them the responsibility to conduct examinations at all levels. It is expected that they will take the system more seriously and put in their best efforts to bring credibility to the system.

GRADING

Grading system was tried for sometime. Though theoretically sound as compared to marking, it will not yield good results unless practised uniformly by all the universities in India. There is greater need for educating the teachers, students, employers and the public at large about the system.

SEMESTER SYSTEM

Semester system though being practised in a few faculties has helped the students in reducing their academic burden to the extent that examinations are conducted twice a year. There is need to provide more flexibility to the system and to the courses offered.

It is worth noting here that for the new courses started at the university, semester system is being adopted and this would pave the way for its greater acceptability. It is, however, regretted that Faculty of Law has scrapped the system after experimenting with it for a short period.

The other steps adopted by the University for reforming the examination system have also proved useful in providing justice to the students and also better conduct of examinations.

However, the reforms in general lack the true spirit behind them. There is a greater need to take the reforms seriously and in true academic spirit. The impact of these reforms can not be truly felt unless corresponding changes are made in the education system. Secondly, every college and department should continue to work in the area of reforms. In other words, experimentation and reforms should be continuous activity at all levels.

However, there is a discernible movement towards change. From traditional and arbitrary approach to examination, we are moving towards systematisation. There is a shift from the standardized traditional form to a more flexible and purposeful form of question-papers, from the use of one form of questions to the use of variety of forms, from fewer questions to a large number of questions, from overall options to limited options, from vague questions to specific questions, from testing of memorisation to testing of higher abilities, from limited coverage to wider coverage of skills and syllabi from periodical evaluation to continuous evaluation, from fewer techniques of evaluation to a variety of techniques, from limited uses of results to their wider uses, from subjective scoring to objective scoring, etc.

There is a need to consolidate what has already been initiated and maintain the tempo of research and innovations in coming years. There is lot of scope to extend the reforms at all the levels. But this is possible only with the continuation of the unit on permanent basis and it is made academically viable and more productive. The examination reforms movement cuts across all the disciplines and all the departments of the University and also the affiliated colleges and hence deserves support from all concerned. The U.G.C. has taken up a bare minimum programme of examination reforms. There is an urgent need for a central co-ordinating agency to streamline the process of examination reforms and to operationalise the theories of better assessment and meaningful evaluation of students. □

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed University)

Vidya Giri, Prasanthinilayam-515134 (A.P.)

I

Admission to various undergraduate and postgraduate courses in Science, Arts, Commerce and Social Sciences in the Institute will be made on the basis of an admission test followed by interview to be held at the following centres :

Test Centres

- (a) Prasanthinilayam Campus (for men candidates)
- (b) Whitefield Campus (for men candidates)
- (c) Anantapur Campus (for women candidates)
- (d) Bhopal (for men and women candidates)
- (e) Bhuvaneswar ,,
- (f) Jaipur ,,
- (g) Madras ,,
- (h) Bombay ,,
- (i) Delhi ,,

Interview Centres

Prasanthinilayam
(University Centre)
Bhopal
Bhuvaneswar
Delhi
Madras
Bombay
Delhi

II

QUALIFICATION FOR ADMISSION

Those seeking admission for five-year integrated course and three year degree courses should have passed Plus 2 of the recognised Board. Those who are appearing for Plus 2 examination before June 1986 are also eligible to apply.

Those who seek admission for postgraduate courses should have passed their first degree courses from any recognised university. Those who are taking the final year of the undergraduate degree course before June 1986 are also eligible to apply.

Admission test for undergraduate courses will be held on 26th May 1986 and for postgraduate courses on 27th and 28th May 1986.

III

The Admission test for the first year of the five-year integrated courses as also of the three year degree courses will have two papers :

- (a) A paper in General English for 1½ hours;
- (b) A three hour paper consisting of three parts of three subject combination such as:
Mathematics, Physics, Chemistry;
Chemistry, Botany, Zoology;
History, Economics, Political Science or Sociology;
Commerce, Accountancy, Economics, Statistics etc.

Those seeking admission for the post-graduate courses will have the following papers:

- (a) A paper in General English for 1½ hours;
- (b) A paper for 2 hours in the subject in which the postgraduate course is sought.

IV

Application form and handbook giving full details of courses and campuses and admission tests will be issued from 10th March 1986 to 15th April 1986 from the above address on payment of Rs. 25/- either as Indian Postal Order or as Bank Draft drawn in favour of Sri Sathya Sai Institute of Higher Learning on State Bank of India, Prasanthinilayam.

The medium of instruction is English.

The Institute is completely residential.

Students admitted to the Institute will be exempt from payment of tuition fees and all special fees such as Library, Laboratory, Games and Sports, Medical fees etc.

The filled in application forms should reach the office of the Registrar before 25th April 1986.

K. Chakravarthi
REGISTRAR

Education outlay raised by 59 per cent

Union Finance Minister, Shri Vishwanath Pratap Singh, presented to the Lok Sabha on 28th February, 1986 the Central Budget for the year 1986-87. Extracts from the Budget Speech as relate to Education are reproduced below for the benefit of our readers.

Stress is also being laid in the new policy on consolidation of secondary education and on launching a large programme of employment-oriented vocational education. Besides, scientific research and training of technical manpower will receive high priority. The Government is committed to implement the education policy as approved by Parliament."

"Art forms and cultural heritage foster national integration as well as national development. I, therefore, propose to increase the outlay of the Department of Arts and Culture from Rs. 19 crores for this year to Rs. 59 crores for 1986-87—an increase of more than 200 per cent. A new scheme is being launched for setting up zonal cultural centres to highlight the cultural kinships that exist among the States and people as part of the composite Indian culture."

□

the outlay for the Ministry of Information & Broadcasting in the current year from Rs. 110 crores to Rs. 242 crores—an increase of 120 per cent.

The 'New Education Policy' will be presented by the Minister of Human Resource Development during this Session of Parliament. I believe, the Policy will give the highest priority to Universalisation of primary education and to spread of adult literacy in 15-35 age-group within the shortest possible time.

CORRESPONDENCE COURSE IN EVALUATION

METHODOLOGY & EXAMINATION

Applications are invited from college/university teachers for admission to Correspondence Courses in Evaluation Methodology and Examinations at Basic Level, Intermediate Level and Advanced Level/Special Professional Course. The duration of each of the three courses is six months. A personal 'Contact Programme' for three days is planned for each of the three courses. A set of prescribed books will be supplied to every candidate free of cost. The Basic Level Course is offered from Regional Centres like Delhi, Bombay and Madras.

Request for prospectus and application form accompanied by a crossed Indian Postal Order for Rs. 5/- drawn in favour of the Secretary, Association of Indian Universities and a self addressed stamped envelope (Re. 1/-) should reach the undersigned. Last date for receipt of applications is 15th March for non-sponsored and 26th March, 1986 for sponsored candidates.

Project Director (Examinations)

ASSOCIATION OF INDIAN UNIVERSITIES

AIU House, 16 Kotla Marg,
New Delhi-110002

"A major thrust in the Seventh Plan is development of Human Resources. This includes education, sports, youth affairs, health, family welfare, women's welfare, environment, art, culture and broadcasting. I propose to enhance the outlays for programmes in this sector from the current year's level of Rs. 1,236 crores to Rs. 1,733 crores for 1986-87—an increase of over 40 per cent.

Education, the Hon'ble Members will agree, is the main instrument of change. Accordingly, I propose to increase the outlay on Education from Rs. 221 crores in the current year to Rs. 352 crores for 1986-87. This implies an increase of over 59 per cent.

In the field of Education mention may be made of two schemes. It has been decided to set up Model School in every district of the country to provide education of high quality and excellence. I propose to provide Rs. 25 crores in 1986-87 for this scheme. For providing equal opportunities to the students in the remote and backward areas in the field of higher education, a National Open University has been set up for which I have provided Rs. 7.5 crores for 1986-87.

Radio and Television are powerful vehicles for spread of information and education. Successful implementation of new concepts and special schemes like dissemination of knowledge in remote areas through Open University are also dependent on the spread of broadcasting. With a view to enlarging the broadcasting infrastructure, I propose to step up

Aids for Educational Counselling

Highly Useful Publications particularly for Embassies, Employment Information and Guidance Bureaus, Guidance Counsellors, etc. etc.

UNIVERSITIES HANDBOOK—1985-86

pp. 1170

Size 8½" × 11"

Hardbound

Comprehensive and latest information covering all the 155 Indian universities including 22 Agricultural Universities, 10 Institutes of National Importance (including 5 IITs) and 11 Deemed to be Universities. Some of the heads of information are : introduction to the university courses of studies—university-wise and discipline-wise, session dates, scholarships and fellowships, library and research facilities, constituent/affiliated colleges, university-wise, deans of faculties, names of teachers, etc.

Rs. 450.00

HANDBOOK OF CORRESPONDENCE COURSES—1984

pp. 98

Size 6½" × 9½"

Paperback

The Handbook covers Universities offering courses through correspondence at Certificate, Diploma, Degree and Postgraduate levels. The heads of information are: admission requirements, eligibility, medium of instructions, examination centres, and other details.

Rs. 16.00

HANDBOOK OF MANAGEMENT EDUCATION—1985

pp. 134

Size 6½" × 9½"

Paperback

A compendium of information for those seeking admission to MBA or allied courses in Management in India. Includes procedure for admission, eligibility requirements, scholarships, fellowships, freeships and stipends, tuition and other details.

Rs. 15.00

HANDBOOK OF MEDICAL EDUCATION—1985

pp. 268

Size 6½" × 9½"

Paperback

A complete and reliable guide for admission to MBBS, BDS, BPharm., BSc (Nursing), BMS (Homoeo), BAMS, BUMS courses, etc. Includes admission procedure, eligibility requirements, time for applying, scholarships, fellowships, freeships, stipends, tuition and other details.

Rs. 20.00

HANDBOOK OF ENGINEERING EDUCATION—1985

pp. 320

Size 6½" × 9½"

Paperback

A complete and reliable guide for admission to BE, BTech., BSc (Engg) courses, etc. in India. Includes admission procedure, scholarships, fellowships, freeships, stipends, eligibility requirements, tuition & other fees and other details.

Rs. 24.00

BOOKS ALSO AVAILABLE WITH LEADING BOOKSELLERS IN THE COUNTRY

Address Enquiries to :

Sales & Publication Officer

Association of Indian Universities

AIU House, 16 Kotla Marg, New Delhi 110002

Telephones : 3310059, 3315105, 3312305, 3313390 & 3312429

Seminar on New Education Policy

A one-day seminar on the "Challenge of Education—a policy perspective" with agricultural education as the major focus was organised at the Narendra Deva University of Agriculture and Technology, Kumarganj, Faizabad on November 22, 1985. The seminar was inaugurated by the Vice-Chancellor, Dr. Kirti Singh. Some of the major issues on which there was a general consensus are as under :

(1) The management of education should be in the hands of educationists. The procedure for appointment of Vice-Chancellor, constitution of the Board of the Managements and the provision for funds for universities needs revision, so that the autonomy of the universities is restored.

(2) The admissions to degree programmes should be restricted and made strictly on merit. Based on statistics available about the employment in agriculture sector, it was shown that on one hand about 26 per cent positions are vacant in the agricultural universities and on the other a large number of graduates and post-graduates are unemployed. Similarly, no trained personnel are available in certain areas whereas there was unemployment in certain others. In this context, the need for manpower planning was emphasised.

(3) Inbreeding was identified as one of the major ailments of university education, particularly so in case of Agricultural Universities. One of the ways suggested by the participants was to reserve 50 per cent seats for students from outside the State. Similarly, in appointment of teachers also some such measures to avoid inbreeding were desired.

(4) The issue of the private colleges in Agriculture was an important one and a decision as to the fate of these colleges be taken once for ever

so that the substandard products, who ultimately come in the mainstream of development, are not produced.

(5) Each State should accept the ICAR Model Act in the interests of uniformity as also to avail of the full advantage of the ICAR support. The teaching, research and extension education as envisaged in the Model Act should be transferred to the agricultural universities by the State Governments.

(6) For the proper and uniform growth of the agricultural universities in each State, the ICAR should provide more funds to the universities which came later and are less developed.

(7) The medium of instruction should be the same at all levels of education in one national language uniformly throughout the country. Instruction through regional languages restricts mobility from one State to another and narrows down the scope of employment. It also abets inbreeding. A firm decision regarding the medium of instruction be taken as early as possible.

(8) More practical, managerial courses such as those suitable for banks, marketing, input manufacturing agencies, self-employment, consultancy services, etc., should be provided at the undergraduate level.

9. It is not necessary for every Agricultural University to introduce doctoral degree programmes in all the faculties. It may also not be possible to achieve excellence in all subjects. Based on the faculty competence and the facilities available, some disciplines may be identified to be recognized as the centres of excellence in agricultural universities. The ICAR should extend financial support to these institutions with an ultimate aim of establishing Regional Postgraduate centres. Stu-

dents from all over the country may seek admission to these centres.

Rs. 7.5 crores for National Open University

A sum of Rs. 7.5 crores has been allocated for the Indira Gandhi National Open University for the fiscal year 1986-87. The amount would be utilised for developing the infrastructure facilities. The construction work is expected to start in April this year and the university would start functioning within the plan period.

A two-member delegation comprising Dr. G. Ram Reddy, Vice-Chancellor and Dr. S.N. Chaturvedi, Officer on Special Duty, will shortly be visiting the British Open University to study its working. They will also explore the possibility of collaboration between the two universities in devising academic courses.

The University, with its headquarters at New Delhi, also proposes to set up 36 regional centres all over the country.

Electronics course at undergraduate level

Under the UGC Scheme of restructuring of courses at undergraduate level, the Lachoo Memorial College of Science, Jodhpur (an affiliated College of the University of Jodhpur) has introduced a 3-year B.Sc. course in Electronics. Candidates who have passed Higher Secondary with Mathematics and Physics are eligible for admission to Part I of the course. Admission to Part II directly is also available for candidates who have either passed B.Sc. (Part I) with Physics and Mathematics or 10+2 examination with Physics and Mathematics. The number of seats available for Part I and Part II are 20 and 25 respectively.

The UGC has sanctioned a grant of Rs. 5 lacs for 5 years for running this course.

Summer School in Analysis and Probability

The Indian Statistical Institute proposes to conduct a summer school in Analysis and Probability from May 26 to June 21, 1986. The topics proposed to be covered in the course are : Probability theory and stochastic processes; Fourier analysis on R^n ; and Functional analysis. The course is primarily intended for university/college teachers, research scholars and M.Sc. students in Mathematics/Statistics/Physics.

Further details about the course can be had from the In-charge, Summer School 1986, Stat-Math

Division, Indian Statistical Institute, 203 B.T. Road, Calcutta-700035.

New centre at JNU

A new Centre for East Asian Languages with Japanese, Chinese, Korean and Mongolian language programmes has been set up in the School of Languages at the Jawaharlal Nehru University. This new Centre has been created after bifurcating the existing Centre for African and Asian Languages, which will now have only Persian, Arabic, Bhasha Indonesia, Uzbek, Pushtu and Sinhalese language Programmes.

With this, the number of Centres in the School of Languages has risen to eight.

News from Agril. Varsities

Inter-University exchange of scientists

Mr. L.D. Kataria, Vice-Chancellor, Haryana Agricultural University pleaded for a closer interaction between the universities and national level institutions and impressed upon the need for inter-University exchange of scientists at the national level. He was presiding over the 2-day meeting of the Regional Committee No. VI of the ICAR held at HAU campus. He also wanted deployment of manpower in agriculture in such a way as to avoid duplication in the research work being carried out at several universities at the same time.

He observed that it was essential to bridge the gap between the potential and actual attainments in the field of agriculture in various stages. Agricultural production varied from area to area and region to region even within the State. Even where potentialities of agricultural production were high, the

productivity continued to be low. These areas called for special attention.

Dr. R.M. Acharya, Deputy Director General, I.C.A.R. informed the meeting that the Council planned to place renewed emphasis on forestry, fisheries and meteorological programmes in the 7th Five Year Plan. He said that farmers will accept agricultural technology only if it was economically viable and culturally acceptable.

Dr. Acharya said that since the investment in agricultural research was very heavy, it was essential that even the on-going research programmes should be closely monitored so as to examine their suitability for their continuance. He regretted that in India research programmes once initiated, tended to continue for a long time even when the major objectives of the programmes had been achieved.

The Commissioner of Agriculture and Animal Husbandary, Haryana, Mr. M.K. Miglani pleaded for

research on the transfer of technology to the farmers so as to ascertain the impact of as well as the change in knowledge and attitude of the farmers towards the new technology. He stressed the involvement of the agricultural universities with the monitoring and evaluation programmes of the government. Dr. H.G. Singh, the Director of Research, Sukhadia University, Rajasthan, pleaded for enhanced research grants to Rajasthan in the areas of agro-forestry, microbiology and agro-meteorology which would help in stabilising production in the State. He also pointed out that because of the large geographical area, Rajasthan had great potential for quantum jump in increasing agricultural production and pleaded for research on zonal level basis in Rajasthan because of the great variability in the State.

The Director of Research, Haryana Agricultural University, Dr. R.P.S. Tyagi referred to the shortage of technical manpower in Veterinary and Animal Sciences.

The Vice-Chancellor, Gujarat Agricultural University, Dr. R.N. Patel said that his State suffered from serious drought and a large area of soil in Gujarat suffered from soil alkalinity. He also pointed out that since the support price in cotton was not forthcoming, the farmers were shifting from cotton to pulses.

The delegates pointed out that the land available to the agricultural universities for research purposes was rather limited. Introduction of remote sensing was also emphasised. Some of the other points made at the Regional Committee meeting were farming systems approach, seed production of high yielding varieties and introduction of bio-technology discipline in the universities.

The meeting was attended by nearly 60 representatives from agricultural universities, I.C.A.R., research institutes, representatives of

State Department of Agriculture, Animal Husbandry and Fisheries from Haryana, Gujarat, Rajasthan, Dadra and Nagar Haveli and senior officers from I.C.A.R.

Seminar on soil borne diseases

The Department of Plant Pathology of the Centre for Plant Protection Studies, Tamil Nadu Agricultural University organised, in collaboration with the University Grants Commission, a 3-day National Seminar on Management of Soil-borne Diseases of Crop Plants. Dr. C.R. Muthukrishnan, Member, Board of Management of the University, inaugurated the Seminar.

Dr. N. Shanmugam, Registrar of the University who also acted as Director of the Seminar, explained the work done by the University on exploiting Mycorrhizal fungi for the management of Soil-borne diseases. Dr. B.L. Jalali, Professor of Plant Pathology, Haryana Agricultural University in his keynote address emphasised the urgent need to devise economical methods for the management of the soil-borne diseases.

In the plenary session which was presided over by Dr. K.C. Alexander, Senior Scientist, Sugarcane Breeding Institute, Coimbatore, emphasis was laid on the importance and scope of biological control of soil-borne diseases.

About 70 Plant Pathologists from several agricultural universities and research institutions participated in the deliberations of the seminar.

New crop varieties

The Tamil Nadu Agricultural University released 15 superior crop varieties for the year 1986. These new varieties—two in rice, three in millets, two each in oilseeds, pulses and fodder crops and one each in turmeric, papaya, vegetable and flower crops—possess not only higher yield potential but also better resistance to pests and diseases than the varieties under cultivation, thus providing stability in performance. These are expected to replace some

CALENDAR OF EVENTS

Proposed Dates of the Event	Title	Objective	Name of the Organising Department	Name of the Organising Secretary/Officer to be contacted
March 9-11, 1986	All India Seminar on Technical Education in India	(i) To provide a forum for discussing the present status of technical education in India ; (ii) To identify the current problems and suggest ways and means for overcoming the same.	The Institution of Engineers (India) & the Institute of Engg. & Technology, Lucknow	Dr. Suresh Chandra, Director, Institute of Engg. & Tech., Lucknow
May 2-15, 1986	Summer School on Crystal Growth, Characterisation and Device Fabrication	An orientation course in (i) Experimental Crystal Growth; (ii) Theories of Crystal Growth; (iii) Nucleation; and (iv) Characterisation	Crystal Growth Centre, Anna University, Madras	Dr. P. Ramasamy, Crystal Growth Centre, Anna University, Madras
May 8-10, 1986	National Seminar on Interaction between research in Universities and Industries	To identify the industries where University research can play an important role and find out ways and means of active interaction between research in Universities and Industries	University of Delhi, Delhi	Dr. Yogesh Kumar, Department of Physics and Astrophysics, University of Delhi, Delhi
May 19-June 1, 1986	Summer School on Crystal Growth and Characterisation of Advanced Materials for Solid State Applications	An orientation course in (i) Experimental Crystal Growth; (ii) Theories of Crystal Growth; (iii) Nucleation; and (iv) Characterisation	Crystal Growth Centre, Anna University, Madras	Dr. P. Ramasamy, Crystal Growth Centre, Anna University, Madras
May 26-June 21, 1986	Summer School in Analysis and Probability	Topics covered are : Probability theory and Stochastic processes; Fourier analysis on R^n ; and Functional analysis.	Indian Statistical Institute, Calcutta	In-charge, Summer School 1986, Stat-Math Divn., Indian Statistical Institute, Calcutta

of the existing varieties and increase the productivity, production and income of the farmers.

These new varieties are : Rice White Ponni; Rice ASD 16; Cholan CO 26; Cumbu CO 7; Panivaragu CO 3; Bengalgram CO 3; Groundnut VRI 1; Sunflower CO 2; Fodder Cowpea CO 5; Fodder Cholan CO 27; Turmeric BSR 1; Papaya CO 6; Snakegourd CO 2; Redgram BSR 1; and Manigold MDU 1.

Kisan Mela at HAU

A 2-day annual Kisan Mela of Haryana Agricultural University will be held at the research farm of the University on 14th and 15th March, 1986. The purpose of the mela is to acquaint the farmers with latest techniques of dry farming. Demonstrations will be organised on various agro-techniques like preparations of

fields before sowing, seed treatment and moisture saving techniques of soil. Visiting farmers would be taken around on guided visits of the demonstration plots of bumper standing crops of wheat, gram, rapeseed, mustard, berseem and sugarcane. Besides suggesting solutions to their day-to-day problems, the scientists of the University would explain to farmers the new scientific techniques applied in the growing of these crops. They would be apprised of the latest methods of sowing, hoeing and seed treatment of different kharif crops.

An agro-industrial exhibition would be organised on this occasion.

Farmers from all over Haryana and adjoining States, viz., Rajasthan, Punjab, Delhi and western Uttar Pradesh are expected to take part in the Mela.

News from UGC

INSAT-1B Programme of UGC

Between 17th and 31st March, 1986 the following schedule of telecast on higher education through INSAT-1B under the auspices of the University Grants Commission will be observed. The programme is of one hour duration every day from 12.45 p.m. to 1.45 p.m. (Repeated from 4 p.m. to 5 p.m.) and will be available on the TV network throughout the country. For the viewers in Delhi and surrounding areas these programmes can be seen on the second channel.

17.3.86

"Plants : Problems with Water"
"Let there be Clay"
"Eye : An Inside Story"

18.3.86

"Phloem"
"From Weimar to Rome"
"The Wright Legacy"

19.3.86

"Mechanisms of Photosynthesis"
"Lasers in Medical Therapy Medexpost"
"The Washington Convention on the Protection of Endangered Species"
"Thalidomide"

20.3.86

"Plant Cell Wall"
"Into a New Century"
"Florida Flamingos"

21.3.86

"Propagation"
"Importance of Fisheries in Our Life"
"Plant Tissue Culture"

22.3.86

"How Flowers Avoid Incest"
"Significance of Ocean Survey in Fisheries"

We Congratulate...

(1) Prof. D.S. Kothari who has been re-appointed as the Chancellor of the Jawaharlal Nehru University for another term of five years with effect from February 24, 1986.

(2) Dr. Sankar Kumar Sen who has taken over as Vice-Chancellor of the Jadavpur University, Calcutta with effect from 1st March, 1986.

(3) Prof. M.S. Lakhapal who has been appointed as Vice-Chancellor of the University of Jammu, Jammu.

(4) Dr. K.C. Malhotra who has been appointed as Vice-Chancellor of the Himachal Pradesh University, Shimla.

"Functions of Management"

"Smaller than Life"

23.3.86 (Sunday)

No Telecast

24.3.86 (Monday)

"Lightning Does Strike Twice"

"Prawn Hatchery"

"A Change"

"New Chips"

25.3.86 (Holi)

No Telecast

26.3.86 (Holi)

No Telecast

27.3.86

"Vibration of Music"

"Green Gold From Ocean: Sea Weeds"

"Literature and Life"

28.3.86 (Good Friday)

No Telecast

29.3.86

"Reflections of Waves"

"Cash from Trash"

"Aeromodelling"

"Holograms"

30.3.86 (Sunday)

No Telecast

31.3.86

"Molecules at Large"

"Logic Designs"

"Art of Animation"

News from Abroad

Advances in solar cell technology

Scientists at the University of New South Wales in Sydney have cracked an important performance barrier in solar-cell design.

A team led by Assoc. Professor Martin Green has designed a new type of silicon solar cell that has achieved 20.9 per cent efficiency—a figure indicating the amount of sun's energy converted into useful electric current.

Professor Green said that the next highest efficiency achieved by a United States research team, was 18.8 per cent. He felt his team was at least two years ahead of anyone else in the field.

One of the keys to the new design is a series of parallel V-shaped microgrooves into the surface of the cell. The grooves make the cell work more efficiently by reflecting sunlight down into it, harnessing more energy than other designs.

The cells have been tested by the Solar Energy Research Institute in Colorado, which carries out the United States Department of Energy's advanced photovoltaic work.

Inexpensive fingerprint detector developed

Scientists at the Australian National University (ANU) have developed an inexpensive high-powered light source for the detection of latent fingerprints.

The Forensic Science Research Unit has developed the lamp, called the Unilite which uses fluorescent techniques to detect the amino acids present in fingerprint deposit. The lamp incorporates a xenon arc light-source, focusing lens and special interference filters. It can visualise,

magnify and improve the definition of weak latent fingerprints so that a better image can be inspected on

a television monitor screen or photographed.

The head of ANU's chemistry department, Professor Ronald Warrenner, said that the Unilite lamp achieved the same standards of proficiency as laser equipment which was expensive to operate and had special safety requirements.

Sports News

Combined universities wrestling team

The following wrestlers are representing Indian universities in the National Championships being held in Delhi from 6th to 9th March, 1986:

48 Kgs. Weight

1. Randhir Singh —HAU
2. Mahabir Prasad —Kurukshetra

52 Kgs. Weight

1. Dayanand —HAU
2. Raj Kapoor —GNDU

57 Kgs. Weight

1. Atma Parkash —GNDU
2. Om Parkash —HAU

62 Kgs. Weight

1. Anup Singh —HAU
2. Rajendra Parsad —Kurukshetra

68 Kgs. Weight

1. Ram Mehar —HAU

2. Azad Singh —HAU

74 Kgs. Weight

1. Ashok Kumar —MDU
2. Paramjeet Singh —GNDU

82 Kgs. Weight

1. Ramesh Kumar —HAU
2. Suresh Kumar —MDU

90 Kgs. Weight

1. Dharambir Singh —HAU
2. Angrez Singh —Punjabi

100 Kgs. Weight

1. Sukhbir Singh —Kurukshetra

Over 100 Kgs. Weight

1. Sunny Gill —GNDU
2. Parveen Kumar —MDU

Shri K.C. Gupta and Shri Udai Chand of Haryana Agricultural University, Hissar are the manager and coach of the team selected at the HAU, Hissar on 18th and 19th February, 1986.

WANTED JRFs

Wanted two JRFs under a UGC project on "MYCOTOXINS", qualifications M.Sc. Botany (Plant Pathology/Microbiology), stipend—Rs. 1000/- p.m. (fixed) to NET qualified and Rs. 800/- p.m. to other fellows. Applications giving full bio-data should reach the undersigned by name on or before March 20, 1986. Interview will be held on March 22, 1986 at 3 p.m. All old and new applicants may attend.

A.N. Roy

Principal Investigator
BOTANY DEPARTMENT
AGRA COLLEGE, AGRA-2.

REGIONAL RESEARCH LABORATORY

(Council of Scientific and Industrial Research)

HYDERABAD

ADVERTISEMENT No. 2/86

Applications in the prescribed form are invited for the following posts:

1. Scientist E-I (Six posts)

(Scale : Rs. 1500-60-1800-100-2000)

(Total emoluments: Rs. 3,435/-)

(a) For posts (1 & 2)

Qualifications & Experience : Ph.D. degree in Organic Chemistry with at least 10 years R & D experience in organic synthesis. Experience in the synthesis of drugs and drug intermediates with an established record of goods published work is desirable.

Job Requirements : The selected candidate is expected to provide leadership for R & D work in the area of drugs and drug intermediates.

(b) For post (3)

Qualifications & Experience : Ph.D. degree in Physical Organic or Organic Chemistry with at least 10 years R & D experience in Physical Organic Chemistry. The candidate should have an established record of good published work in the area of Physical Organic Chemistry.

Job Requirements : To organise research work in the area of Physical Organic Chemistry and to interact with organic chemists working in the area of organic synthesis, drugs and agrochemicals.

(c) For post (4)

Qualifications & Experience : At least a First Class M.Sc. degree in Chemistry with 12 years research experience including 5 years experience in the application of Computer to organic synthesis.

Job Requirements : To initiate research programme in application of Computers to organic synthesis and

interact with Scientists working in the area of drugs and agro-chemicals.

(d) For post (5)

Qualifications & Experience : Ph.D. degree in Chemistry with at least 10 years of R & D experience, specially in the application of NMR Spectroscopy and/or Mass Spectrometry to problems in Organic Chemistry.

Job Requirements : To provide leadership to Scientists working in the areas of NMR Spectroscopy or Mass Spectrometry. To provide guidance in the application of NMR Spectroscopy and Mass Spectrometry to R & D work in the area of drugs and agrochemicals.

(e) For post (6)

Qualifications & Experience : Ph.D. degree in Physical or Polymer rheology. Experience in the field of development of petroleum additives and testing of petroleum products will be desirable.

Job Requirements : To provide leadership to group of Junior Scientists working in the area of process development of polymeric petroleum additives and their application in petroleum industry.

2. Scientist 'C' (Four posts)

(Scale: Rs. 1100-1600)(Total emoluments: Rs. 2,935/-)

(a) For posts (1 & 2)

Qualifications & Experience : Ph.D. in Organic Chemistry with at least 6 years R & D experience in organic synthesis. Experience in the synthesis of drugs and drug intermediates with an established record of good published work is desirable.

Job description : The selected candidate is expected to carry out independent R & D work in the area of organic synthesis.

(c) For post (3)

Qualifications & Experience : Ph.D. in Organic Chemistry with at least 6 years experience in the area of Carbohydrates.

(d) For post (4)

Qualifications & Experience : Ph.D. in Organic Chemistry or Physical Chemistry with at least 6 years experience in the field of NMR Spectroscopy and/or Mass Spectrometry. The candidate should have an established record of good published work in these areas.

3. Scientist 'B' (10 posts) (5 posts Reserved for SC/ST)
(Scale: Rs. 700-1300) (Total emoluments Rs. 2,040/-)

Common for all posts

Qualifications & Experience : 1st Class M.Sc. in Organic Chemistry with 3 to 8 years experience in synthetic organic chemistry.

Desirable : Ph.D. degree in Organic Chemistry.

Job description : To carry out R & D work in any of the following areas : Organic synthesis/Physical organic chemistry, Synthetic drugs, Carbohydrates, NMR and Mass Spectrometry.

General Information

- (i) All the above posts carry usual allowances as admissible to Central Government employees of the same status stationed at Hyderabad. Higher initial start may be considered for deserving candidates.
- (ii) Appointment against the above posts will be on contract carrying CPF benefits for a period of six years (including the probationary period of two years) in the first instance except for CSIR employees already confirmed against lower posts.
- (iii) The number of vacancies is provisional and the total number to be filled in each discipline/area will depend upon the actual vacancies available at the time of recruitment vis-a-vis the need and

availability of talents from among those called for interview.

- (iv) Only such candidates who in the opinion of the Laboratory authorities suit the institutional requirements will be called for interview. Mere fulfilment of qualifications does not entail any right on the candidate for being called for interview/considered for the post. Outstation candidates called for interview will be paid to and for single second class rail fare from the actual place of their residence whichever is nearer to Secunderabad Railway Station on production of rail ticket numbers/cash receipts.
- (v) Applications from employees working in Government Departments, Public Sector organisations and Government funded research agencies will be considered only if forwarded through proper channel and with a clear certificate that the applicant will be relieved within one month of receipt of the appointment orders.
- (vi) Prescribed application forms may be obtained from the Administrative Officer, Regional Research Laboratory, Hyderabad-500 007 (A.P.) by sending a requisition along with a self-addressed stamped envelope (23x10 cm size with 0.70 postage) on or before 28-2-1986. Applications duly completed (supported by attested copies of all the certificates/testimonials) should be sent along with a non-refundable fee of Rs. 8.00 in the form of crossed Indian Postal Order, drawn in favour of 'Director, Regional Research Laboratory, Hyderabad-500 007. However, SC/ST candidates need not pay any application fee. The applications should be sent so as to reach him on or before 15-3-1986. Applications received after this date will not be entertained.
- (vii) INCOMPLETE APPLICATIONS WILL SUMMARILY BE REJECTED AND NO INTERIM ENQUIRIES WILL BE ENTERTAINED. CANVASSING IN ANY FORM WILL BE A DISQUALIFICATION.
- (viii) SEPARATE APPLICATION IS REQUIRED TO BE SUBMITTED FOR EACH POST INDICATING CLEARLY THE ADVERTISEMENT NUMBER AND SERIAL NUMBER OF THE POST APPLIED FOR.

REGIONAL RESEARCH LABORATORY

(Council of Scientific & Industrial Research)

HYDERABAD

Advertisement No. 3/86

Applications are invited in prescribed form for post at Sl.No. 1 (Technical Assistant Gr. VIII) and for other posts on plain paper in the format given at the end of the advertisement.

1. **Technical Assistant Gr. VIII** (Five posts—Reserved for SC/ST—Non-ST candidates may also apply)

(Scale : Rs. 425-15-500-EB-15-560-20-700)

Total emoluments ; Rs. 1,371/-.

Qualifications & Experience : A 1st Class Bachelor's degree in Chemistry with 2 years research experience in any branch of Chemistry.

Desirable : M.Sc. in Organic/Physical Chemistry

2. **Receptionist** (One post—Females only need apply)

(Scale : Rs. 330-10-380-EB-12-500-EB-15-560)

Total emoluments ; Rs. 1,140/-.

Qualifications & Experience : Graduate from a recognised University in Science/Arts/Commerce with two years' experience as a Receptionist in a reputed industrial house/Public Sector Undertaking/Government/Semi-Government Organisation. Fluency in English is necessary. Good knowledge of Hindi and Telugu is very desirable. Knowledge of switch-board or telex operation would be an additional attribute.

The candidate should be smart with a charming personality, pleasing manners and good communication skills.

Job requirements : To attend to the normal duties of reception such as receiving visitors, maintaining liaison with various Divisions and guiding the visitors properly to meet various officers in the Laboratory, attending the reception arrangements of visiting VIPs and dignitaries; and to develop public relations of a high order, handling travel reservations, confirmations, if entrusted, and to attend to such other duties as may be assigned from time to time.

Age : Below 30 years.

3. **Watch & Ward Assistant Gr. I** (One post) (Reserved for Ex-Serviceman)

(Scale ; Rs. 380-12-440-EB-15-560-EB-20-640)

Total emoluments : Rs. 1,267/-.

Qualifications & Experience : Matriculate with atleast 7 years experience in Security/Watch & Ward Department of a large industrial undertaking or R & D organisation or in Police or Defence Services. Candidates should be well conversant with modern methods of security, fire prevention, etc. and be able to handle fire-arms and should possess good physique. Preference will be given to Ex-Serviceman in the age group of 35-40 years, relaxable in the case of CSIR employees and in the case of SC/ST candidates.

Job requirements : To attend to day-to-day functions relating to Security, Watch & Ward, fire-fighting arrangements of the Laboratory and its pilot plants, liaison with the local police authority, etc. and such other duties as may be assigned from time to time.

4. **Staff Car Driver** (One post)

(Scale : Rs. 260-6-290-EB-6-326-8-366-EB-8-390-10-400)

Total emoluments : Rs. 939/-.

Qualifications & Experience : Minimum VIII class with a valid driving licence for light-heavy vehicles, and 8 years experience in driving of light/heavy vehicles, of which 5 years' experience preferably as a Staff Car Driver in a Government/Public Sector Undertaking.

Age : Not exceeding 28 years as on 1-3-1986.

Desirable : Matriculate with knowledge of mechanism and repair of petrol and diesel vehicles. Candidates should possess sound physique and excellent eye-sight and be conversant with places in twin cities of Hyderabad and Secunderabad and also should be able to drive long distance to out-stations in Andhra Pradesh State as well as any where in India. Candidate should be able to read and write English and speak Hindi and Telugu.

Experience and age is relaxable in the case of candidates who are otherwise considered more suitable for the post.

5. Assistant Manager-cum-Store Keeper (One post)
(Scale Rs. 260-6-290-EB-6-326-8-366-EB-8-10-400)
Total emoluments: Rs. 939/-

Minimum qualifications : A pass in Matriculation/HSC/SSLC.

Experience : Experience in a similar capacity and/or house-keeping/steward in any reputed Hotel/Restaurant for not less than 3 years.

Age : Not exceeding 28 years. Relaxation of age will be considered in otherwise exceptionally qualified/experienced candidates.

6. Graduate Trainee/Technical Apprentice : (13 Positions) (Stipend Rs. 300/- (all inclusive) p.m. —2 positions reserved for SC/ST).

Qualifications : A good Diploma in Chemical Engineering OR Mechanical Engineering OR Electrical Engineering OR Tele-Communication Engineering/Instrumentation/DMIT OR a Degree in Science with Mathematics, Physics and Chemistry, OR Degree in Engineering.

Age : Between 19 and 25 years as on 31-3-1986.

Period of Training : One year.

Note : On satisfactory completion of the training the Laboratory does not guarantee regular appointments. Candidates who have once undergone training as Technician Apprentices under the Apprentices Act, 1961 will not be considered.

General Information

1. The posts (except serial number 6) carry usual allowances as admissible to Central Government employees of the same status stationed at Hyderabad and are pensionable, subject to rules and regulations in force in the CSIR.

2. The number of vacancies is provisional and the total number to be filled will depend upon the actual vacancies available at the time of recruitment vis-a-vis the need and availability of talents from among those called for interview.

3. Out of (5) posts of Technical Assistant Gr. VIII (Scale Rs. 425-700) (3) posts for ST and two for SC have been reserved. Out of (3) posts reserved for ST, two are being advertised for the second time. Hence, against these two posts, non-ST candidates will be considered in case of non-availability and/or non-suitability of ST candidates.

4. Applications for the posts at Serial No. 1 (Technical Assistant Gr. VIII—Rs. 425-700) should accompany a non-refundable fee of Rs. 8.00 in the form of a crossed Indian Postal Order drawn in favour of the

'Director, Regional Research Laboratory, Hyderabad'. However, SC/ST candidates need not pay any application fee. Candidates called for interview/test for these posts will be paid single second class rail fare, (except for serial number 6—Graduate Trainee) to and fro, from the place of their undertaking the journey or from their normal place of residence whichever is nearer to Secunderabad Railway Station on production of rail ticket numbers/cash receipts. IPOs purchased before the date of publication of the advertisement will not be accepted. The application should be made in the prescribed form for the post of Technical Assistant Gr. VIII only to be obtained from the Administrative Officer, Regional Research Laboratory, Hyderabad-500 007, on or before 1-3-1986. Applications duly completed in all respects should reach on or before 15-3-1986.

No application fee is prescribed for the other posts (Sl. Nos. 3 to 6). SC/ST candidates called for interview/test for these posts will, however, be paid single second class rail fare by passenger train each way from their normal place of residence or the place of undertaking the journey whichever is nearer to Secunderabad Railway Station subject to production of railway cash receipt/ticket numbers, provided the distance travelled by them by rail each way exceeds 80 k.ms. and they are not already employed in Central/State Government Corporations/Public Sector Undertakings/Local Government institutions and Panchayats. Non-SC/ST candidates are not eligible for any travelling allowance for attending the interview for these posts.

5. Applications for posts at Sl. No. 2 to 6 should be made on plain paper indicating the following duly supported by attested copies of all the certificates and testimonials may be sent to the Director, Regional Research Laboratory, Hyderabad-500 007 so as to reach him on or before 15th March, 1986.

6. Applications for the post of Receptionist should accompany a passport size photograph.

7. Only such candidates who in the opinion of the Laboratory authorities suit the institutional requirements will be called for interview/test. Mere fulfilment of qualifications does not entail any right on the candidate for being called for interview/considered for the post.

8. Applications from employees working in Government Departments/Public Sector Organisations and Government funded agencies will be considered only if

forwarded through proper channel and with a clear certificate that the applicant will be relieved within one month of receipt of the appointment orders.

9. INCOMPLETE APPLICATIONS WILL BE

SUMMARILY REJECTED AND NO INTERIM ENQUIRIES WILL BE ENTERTAINED. CANVA-SSING IN ANY FORM WILL BE A DISQUALIFI-CATION.

PROFORMA

1. Advertisement Number and post applied for with serial number:
2. Name (in block letters):
3. Father's/Husband's name:
4. Date of birth:
5. Address for correspondence:
6. Educational qualifications with details:

	Year	Division	Subjects	University
HSC/SSLC				
PUC/Inter				
B.A./B.Com./B.Sc.				

7. Other degree/diploma:
8. Previous/present experience/employment, and salary being drawn in the present post, if any:
9. Whether belongs to Scheduled Caste/Scheduled Tribe:
10. Are you related to any of the employees of RRL, Hyderabad ? If so, indicate the name and designation of the employee, with nature of relationship ?
11. Employment Registration No. & Code:
12. Languages known:
13. Any information not covered above:

Signature of the Candidate

BERHAMPUR UNIVERSITY

BHANJA BIHAR : BERHAMPUR-7

(GANJAM) ORISSA

No. 2185/I-2/85 Estt. I/BU/86

Date : 25-2-86

ADVERTISEMENT

Applications are invited for the following posts in the prescribed form (Seven copies) obtainable from the Registrar, Berhampur University on payment of Rs. 10/- (Rupees ten only) in person or by Bank Draft drawn on the State Bank of India in favour of The Registrar, Berhampur University alongwith a self addressed envelope (22×10 c.m.) with Rs. 1.50 (one rupee and fifty paise only) postage stamp affixed on it.

Applications duly filled in alongwith attested copies of the certificates, mark lists, testimonials, and publications, etc. must reach the undersigned on or before 20.3.86.

Applications received after this date will not be entertained.

Subject	Name of the post	No. of vacancies	Field of speciali-sation
History	Reader	1	Archaeology
Journalism and Mass Communi-cation	Reader	1	—

Scale of Pay

Reader : Rs. 1200-50-1300-60-1900/-

Qualifications :

Reader : Good academic record (as defined by U.G.C.) with a Doctoral Degree or equivalent published work. Evidence of being actively engaged in (i) Research or (ii) innovation in teaching methods or (iii) Production of teaching materials.

About five years experience of teaching and/or research provided that three or more years work as Lecturer or in an equivalent position.

This condition may be relaxed in the

case of candidates with outstanding record of teaching/research.

Instructions :

- (i) Candidates must submit their applications duly filled in alongwith Bank Draft for Rs. 5/- (five only) drawn on State Bank of India, Bhanja Bihar in favour of the Registrar, Berhampur University.
- (ii) Candidates who are in service should submit their application through proper channel. No officer from O.E.S. will be called for interview unless his application is forwarded by Government.
- (iii) Selected candidates will be required to join within one month of the date of issue of the appointment order, unless otherwise specified or permitted. No T.A. will be paid to the candidates for attending the interview.
- (iv) The University reserves the right to fill up or not to fill up the posts and/or to call only selected candidates for interview.

Sri R.N. Rajguru
REGISTRAR

AIU Library

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month' while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research scholars and students of education are welcome to use these resources. The Library is open from 9-30 a.m. to 5-30 p.m. Monday through Friday. Access can also be had through inter library loan for which requisition must be made through your Librarian.

THESES OF THE MONTH

A list of Doctoral Theses Accepted by Indian Universities

HUMANITIES

Philosophy

1. Das, Dipty Moyee. *Gandhi's doctrine of truth and violence: A critical study*. NEHU, Shillong.
2. Dattatraya, Purushottam. *Bhagavat : Dharmanchee tattwami-mansa*. Nagpur U.
3. Grimes, John. *Advaita Vedanta and the problem of religious language*. U Madras.
4. Guha, Samarendra. *Some semantic studies of ethical sentences*. U Calcutta.
5. Krishnamurthy, A. *Nature-education, a philosophical perspective*. U Madras.
6. Pratap Singh, L. *A study of the concept of social justice according to some contemporary Indian thinkers with special reference to Gandhi*. U Madras.
7. Tiwari, Parashuram. *Bodh niti darshan ka sameekshatmak adhyayan*. HS Gour, Sagar.

Fine Arts

Drawing & Painting

1. Mariamma, G.T. *Angelo Da Ponseca : His art and his place in Indian Christian painting*. U Madras.
2. Ojha, Mahesh Kumar. *Bundi chitrakala ka sanskritik evam shailigat adhyayan, 17veen shati se 19veen shati*. Meerut U.

Music

1. Premeela, M. *Kathakalakshepa : A study*. U Madras.

Language & Literature

English

1. Bais, Hari Shanker Singh. *The art of Stephen Crane*. HS Gour, Sagar.
2. Chandorkar, Suman. *Emerson's philosophy of life*. Nagpur U.
3. Govindarajulu, P.R. *The impact of the philosophy of transcendentalism on the works of Herman Melville*. U Madras.
4. Hathi, Yogeshkumar Pramodrai. *E.M. Forster : A study of his novels with reference to his theory and practice of fiction*. SPU, Vallabh Vidyanagar.
5. Lalitha, V. *A study of errors in the use of English noun phrases*. U Madras.
6. Mishra, Bonani. *The image of man in the novels of Graham Greene*. Meerut U.
7. Nair, S.A. *Study of the themes in the plays of T.S. Eliot*. RDV, Jabalpur.
8. Natarajan, N. *The dialectic of crime and punishment in Dostoevsky and Conrad : A comparative study*. U Madras.

9. Pandit, Pran Nath. *The impact of childhood on adult life as a recurrent theme in Graham Greene*. Ranchi U.
10. Pathak, R.S. *Oblique poetry in Indian and Western poetics*. D. Litt. HS Gour, Sagar.
11. Paulraj, Susibai. *The impact of Charles Lamb on the works of E.V. Ducas*. Madurai Kam U.
12. Prabhakaran, T.S. *Immense living the Saga of Henry Miller, an American Guru*. U Madras.
13. Surendra Kumar. *The later poetry of D.H. Lawrence, Pansies, More Pansies, Nettles, Last Poems : An evaluation*. Meerut U.
14. Valakya, Amichand Singh. *G.B. Shaw as a dramatist of social and political ideas*. Meerut U.
15. Vijaya Lakshmi. *Hero in the fiction of John O'Hara*. Kum U, Nainital.

Sanskrit

1. Awasthi, S.C. *Balmikiya Ramayan ke prishth bhooni mein Anand Ramayan ka adhyayan*. Kum U, Nainital.
2. Bilolikar, Rajani. *Rigvedic mantras in puranic settings*. OU, Hyderabad.
3. Chauhan, Usha. *Some aspects of the philosophy of Bharat-hari*. U Madras.
4. Chhimwal, U.C. *Karan ka jeewan darshan : Mahabharat ke sandarbh mein*. Kum U, Nainital.
5. Deep Shikha. *Natya rachna kaushal ke drishti se Mahabharat per ashrit Bhas ke natakon aur Bhattnarayan ke Venisanhar ka tulnatmak adhyayan*. Meerut U.
6. Dhaka, Indu. *Bharat Parijatam ka sameekshatmak adhyayan*. Meerut U.
7. Gupta, Chandra Prakash. *A study of the Atmetattvaviveka of Udayanacharya*. U Delhi.
8. Joshi, K.C. *Sanskrit sahitya ke Ramkatha mein Rajdharm: Ek adhyayan*. Kum U, Nainital.
9. Kalouni, R.C. *Sanskrit sahitya mein Himalaya ka swarup*. Kum U, Nainital.
10. Pandey, Gita. *Shing Bhoopal virachit Rasniv Sudhakar ka samalochanatmak adhyayan*. Kum U, Nainital.
11. Pandey, Manju. *Mrichhkatik ka alochanatmak adhyayan*. Mag U, Bodh Gaya.
12. Pande, Prema. *Skand Puran : Awanti Khand ka sahityik evam sanskritik adhyayan*. Kum U, Nainital.

13. Pattaminal, R. *The pratyaktitvacintaman of Sadananda : A study*. U Madras.

14. Prasad, Rama Nand. *Pramukh shleshmulak mahakavyon ka bhasha vaigyanik adhyayan*. Kum U, Nainital.

15. Thakur, Parma Nand. *Ethical elements in Balmiki-Ramayana*. Pb U, Chandigarh.

16. Tripathi, Shesh Narain. *Sankalp Suryodaya ka sameekshatmak adhyayan*. Meerut U.

17. Vasudevachariar, N.V. *Yadavabhyudaya : A study*. U Madras.

18. Veezhinathan, Narayanaswami. *The Tarkasangraha-Dipika-Prakasika (i) with the commentary-Balapriya-Part I, (ii) with the Commentary Prasara-Part II, D.Litt.* U Madras.

Punjabi

1. Kulbeer Kaur. *Evaluation of Punjabi historical novel, 1897-1975*. Pb U, Chandigarh.

2. Sukhdev Singh. *Marxvadi Punjabi alochana*. U Delhi.

Hindi

—1. Ashok Kumar. *Nirala-sahitya mein Nirala ke vyaktitva ke abhivyakti*. Meerut U.

2. Bhanushali, Mohini. *Prasadottar Hindi natak mein prateekatmakta*. U Delhi.

3. Dhasmana, Prabhat Chandra. *Swatantrayottar lambi kavita*. U Delhi.

4. Garia, P.S. *Hindi ke madhyayugeen premakhyan tatha Kumauni premakhyanak lok gathaon ka tulnatmak adhyayan*. Kum U, Nainital.

5. Gaur, S.K. *Kavya chetana ka tatvik anusheelan aur adhunik kavya mein uski abhivyakti*. Kum U, Nainital.

6. Grewal, M.P.S. *Adhyapak Poorn Singh : Jeevan aur Sahitya*. Kum U, Nainital.

7. Gupta, Awadhbihari. *Nayee kavita mein mulya chetna*. BKU, Jhansi.

8. Gupta, Jagdish Prasad. *Nirgun Tattvon ke adhar per Tulsi sahitya : Ek adhyayan*. BKU, Jhansi.

9. Guptarya, Suprabha. *Swatantrayottar Hindi alochana*. U Calcutta.

10. Jagdish Kishori. *Dwivedi yugeen kavya mein hasya aur vyangya*. OU, Hyderabad.

11. Janawad, Mahadev Bhimappa. *Sathottar Hindi aur Kannada kahani ka tulnatmak adhyayan, 1960-80*. U Kar, Dharwad.

12. Joshi, Bharati. *Acharya Hazari Prasad Dwivedi ke upanyason mein sanskritik nirupan*. Kum U, Nainital.

13. Kashyap, Devinder Nath. *Bilaspuri boli ka varnatmak adhyayan*. Pb U, Chandigarh.

14. Katiyar, Kum Kum. *Premchand aur Renu ke upanyason ke gram chitran ka tulnatmak adhyayan*. U Bihar, Muzaffarpur.

15. Khanna, Kailash. *Jhansi Jile mein swatantrata sangram ka itihis, 1857-1947*. BKU, Jhansi.

16. Kholia, Geeta. *Hindi kavitriyon ke kavya ka saundarya shastriya adhyayan, 1901 se 1980 tak*. Kum U, Nainital.

17. Mishra, Ajay. *Hindi padavali sahitya per Maithili lok-sangeet ka prabhav*. LNMU, Darbhanga.

18. Mithilesh Kumari. *Bhushundi Ramayan aur Ramcharitmanas ka tulnatmak adhyayan*. BKU, Jhansi.

19. Premapati, Ram Bilas Mahoto. *Dinkar ke kavya sidhant*. LNMU, Darbhanga.

20. Rajan, C.S. *Kala ke sambandh mein Jung ke manovagya-nik siddhant ke cick mein Ajneya ke kavita ke pragbimbiya aur mithakiya tatvon ke adhyayan*. U Cochin.

21. Shah, Danyanti. *Dinkar ke kavya ka saundarya shastriya adhyayan*. Kum U, Nainital.

22. Satya Paul. *Sathottari Hindi kavita ka samajshastriya adhyayan, 1962-82*. Pb U, Chandigarh.

23. Saxena, Suman. *Tulsi ke vandana vandaniya gurujan evam vinay darshan*. BKU, Jhansi.

24. Sayata, Chandra. *Anuvad prakriya : Ek shastriya adhyayan, shashkiya pariprekshya mein*. Devi Ahilya, Indore.

25. Seth, Jagannath. *Ramcharitmanas ke vyaktivachak namon ka vivechanatmak vyakhyatmak kosh*. U Calcutta.

26. Shanker, Ila. *Bisveen shati mein Hindi ke pramukh sahityik vivad : Kavita ke sandarbh mein*. U Delhi.

27. Sharma, Jag Mohan. *Swachhandatawad ke alok mein Dinkar ka kavya*. U Delhi.

28. Sharma, Narendra Kumar. *Manak Hindi aur uske vivah rupon ka tulnatmak adhyayan*. Meerut U.

29. Sharma Shyamlal. *Rakshan aur Shalwag ke kavya ka tulnatmak adhyayan*. Utkal U.

30. Sharma, Subhagi. *Aacharya Sita Ram Chaturvedi aur unkee sahitya saahna*. Meerut U.

31. Sheela, V.P. *Girija Kunar Mathur ka kavya : Samvedana aur shilpa*. U Cochin.

32. Singh, Jara najay. *Hindi nibanth ke vikas mein Acharya Hazari Prasad Dwivedi ka sthan*. Mag U, Bodh Gaya.

33. Singh, Samar Pal. *'Lokayetan' mein lok tattva*. Meerut U.

34. Singh, Sushila. *Hindi ke naye kavya natak : Ek anusheelan*. HS Gour, Sagar.

35. Sounakiya, Shyamsunder. *Bhind Jile kee boli ka anusheelan : Samaj, sanskriti tatha bhashshastra ke vishisht sandarbh ke antargat*. BKU, Jhansi.

36. Suchitra, Vrindavan Lal Verma ke itihisik upanyason mein lok sanskriti. Meerut U.

37. Tiwari, Shankarsharan. *Kavi Hridayesh ka vyaktitva evam krititva*. BKU, Jhansi.

38. Tiwari, Usha. *Adhunikta ke pariprekshya mein Rajendra Yadav ke katha sahitya ka anusheelan*. HS Gour, Sagar.

39. Vishwakarma, Shobhalal. *Harishankar Parsaen aur Sharad Joshi ke vyangya rachnaon evam samaj-darshan ka tulnatmak adhyayan*. HS Gour, Sagar.

40. Viswam, V.V. *Adhunik kavya pravritiyon ke roopayan mein Nirala ka yog*. U Cochin.

41. Vyas, Kumanlal. *Sri Arvind Darshan aur uska Pant aur Sundaram per prabhav*. OU, Hyderabad.

Urdu

1. Ansari, Mohd. Taiyeb. *Aahud-e-asfia mein Urdu nasar nigari*. Gulbarga U.

2. Haseen Ahmed. S.S. *Life and works of Salam Sandilvi*. LNMU, Darbhanga.

3. Khan, Waris Ahmad. *Impact of film on Urdu poetry*. JNU, New Delhi.

4. Shamim Ahmad. *Life and poetry of Hazrat Mohsin Dana-puri*. Mag U, Bodh Gaya.

5. Syed Hussain Naseem. *Urdu mein Bachchan ka adab*. Meerut U.

Bengali

1. Barman, Ramendra. *Bankimchandra-o-Bankim sarmasa-mayik upanyaser-rajnaitik chetna*. U Calcutta.

2. Chakraborti, Chittaranjan. *Sahitya sadhanai trayee rajnitibid-Deshbandhu, Deshapran, Netaji*. U Calcutta.

3. Chakraborti, Tusharkanti. *Short story of Bibhutibhusan Bandyopadhyay : Author's mentality, content and activity*. NBU, Rajarammohanpur.

4. Chaudhuri, Aditya Kumar. *Bangla gadya sahitya-o-katha sahityer ekti dhara karasahitya*. U Calcutta.

5. Mukhopadhyaya, Ranjit Kumar. *Rahr's nature, environment and life aim of regional novel and Tarasankar's success : An assessment*. NBU, Rajarammohanpur.

Oriya

1. Nayak, Labanyabati. *Oriya charita sahitya*. Utkal U.

Marathi

1. Wamanrao, Dilip. *Shreeshivkalyavakat Nityanandaikya-deepika : Ek chikitsak abhyas*. Nagpur U.

Tamil

1. Asirvatham, John. *Kuttu as expounded in Cilappatikaram and Atiyarukku Nallar*. U Madras.

2. Balasubramanian, K.V. *Purapporul in sangam literature*. U Madras.

3. Chockalingam, N. *The literary theories of Vannacharappan Dhandapani Swamigal*. Madurai Kam U.

4. Gomathinayagam, T.C. *A study in Villuppattu*. U Madras.

5. Jothi, Bai. *The structure of Thirai and Thurai in Cankam literature*. Madurai Kam U.

6. Kayarohanam, P.C. *The concept of God as realised by the Siddhas*. U Madras.

7. Manikantaraman, S. *Teaching Tamil as a first language in the colleges of Tamilnadu*. U Ker, Trivandrum.

8. Nagarajan, K. *The concept of the mind of the Tamils*. U Madras.

9. Nalangilli, R. *Pattiyals : A comparative study*. U Madras.

10. Padmavathy, R. *Trends in Malayalam novels translated in Tamil*. U Madras.

11. Palani, V.M. *A study of Sivagnana Botham, Saiva Siddhantham*. U Madras.

12. Pichaiappillai, S. *A study of folk songs in Tiruchirapalli District*. U Madras.

13. Rajarajeshwari, P.B. *Nalayira divya prabandatil akapporul marapukal*. U Madras.

14. Rajasekaran, K. *The short stories of Jayakanthan and Kesavadev : A comparative study*. U Madras.

15. Sakunthala, C.R. *Poems of Thayumanavar : A study*. U Madras.
16. Sathiamoorthy, M. *Folk tales in Tamil : A study*. U Madras.
17. Savithiri, V. *A comparative study of the poems of Kapilar and paraner*. U Madras.
18. Selwyn Raj, D. *A study of social dramas in Tamil since 1961*. U Madras.
19. Sudaroli, A.H. *Ponmudi, Kalaingar Karunanidhi's Madalgal : A critical study, 1970-1980*. U Madras.
20. Syed Abdul Rahman. *Symbol in new verse*. U Madras.
21. Thankamony, S. *The role of Bharathi and Bharathidasan in the renaissance on renaissance of Tamil poetry*. U Ker, Trivandrum.
22. Valan Arasu, P. *Thambavani Thiran*. Madurai Kam U.

Malayalam

1. Sreedevi, B. *Syntactic patterns of Malayalam and Telugu*. U Ker, Trivandrum.

Kannada

1. Bhat, B. Harikrishna. *The origin and development of early modern Kannada literature, 1060-1920*. U Madras.
2. Joshi, Ramakrishna Satyalinga. *Yakshagana kalege idagunji melada koduge*. Kar U, Dharwad.

Telugu

1. Adeppa, Y. *Pothana bhagavatamubhasha, tattwa, samalochanam*. Nagarjuna U.
2. Krishna Reddy, C. *Janpada nirtya kala : Dharmavaram talukanadharanga*. SKU, Anantapur.
3. Mrinalini, K. *Narative technique in Telugu social novel*. OU, Hyderabad.
4. Muthusamy, T. *An analytical study of physical education as revealed in the ancient Telugu literature*. U Madras.
5. Nagabhushanam, A. *Commentaries of Trilingalakshna Sesha, (Proudha Vyakarana) : A critical study*. Nagarjuna U.
6. Rama Chandra Reddy, G. *Telugule vachna kavitha : Avirbhava vikasalu*. Nagarjuna U.
7. Sarada, B.V. *Praaciinaadhra kavula sangita, pratipati*. Nagarjuna U.

8. Sastri, K.D.S. *The influence of Sanskrit poets on Srinadha, Nagarjuna U.*

9. Usha Rani, C. Venkata. *A critique on Chitra Bharatmu of Charigonda Dharinana*. U Madras.

Geography

1. Harkishan. *Settlement network and retail trade structure in National Capital Region (NCR) of Haryana*. Meerut U.
2. Sahoo, Debaraj. *Cuttack standard urban area : A study on urban geography*. Utkal U.
3. Suyal, Trilochan. *Jila Almora : Jal sansadhan*. Kum U, Nainital.
4. Verma, Rekha. *The historical geography of Malwa Region, 1707-1857, Maratha period*. Devi Ahilya, Indore.

History

1. Anita Kumari. *The brahmanical (religious) art in Jammu, 1700-1900*. U Jammu.
2. Arya, Harphool Singh. *Shakhawati lethikano ka itihās evam yogdan*. U Raj, Jaipur.
3. Bhaskara Murthy, D. *Mesolithic and neolithic cultures of the Lower Godavari Valley*. Nagarjuna U.
4. Chandrababu, D.S. *Social protest and its impact in Tamil Nadu with reference to self-respect movement from 1920's to 1940's*. U Madras.
5. Joshi, A.K. *Uttarakhand ke samajik tatha sanskritik punar-jagaran mein Arya Samaj evam Ram Krishan Mishan ka yogdan*. Kum U, Nainital.
6. Joshi, Padmakar Prabhakar. *Raghuji III and his times, 1818-1853*. Nagpur U.
7. Manickam, V. *Agriculture and trade in the Kongu Country, C.A.D. 900-A.D. 1300*. U Madras.
8. Narain, Kumar Amrendra. *The land system in Ancient Bihar*. Mag U, Bodh Gaya.
9. Ray, Reba. *Ancient settlement patterns of Eastern India*. U Calcutta.
10. Sundararajan, S. *Purananuru in its historical setting*. U Madras.
11. Warikoo, K. *Russian Central Asia and Kashmir : A study in the context of Anglo-Russian rivalry over Central Asia, 1850-1920*. JNU, Delhi.

ADDITIONS TO AIU LIBRARY

- Altbach, Philip G. *Perspectives on comparative higher education: A survey of research and literature*. London, Mansell, 1985. 53p.
- _____ and Kelly, David H. *Higher education in international perspective : A survey and bibliography*. London, Mansell (c 1985) xi, 583p.

- Association of Commonwealth Universities, London. *Roles and responsibilities: Seminar papers at the Council meeting, Nigeria, 1985*. London, Author, 1985. 145p.

- Association of Indian Universities, Delhi. *New education policy : AIU's recommendations on higher education*. Delhi, Author, 1986. 10p.

- Bhadra, B.R. and others. *Studies on students' academic achievement in the trimester system of education*. Bangalore, University of Agricultural Sciences, 1974. 25p.

- Bhatia, S.C. and Mehta, M.L., ed. *Development-oriented adult education*. Delhi, IUACE, 1985. 91p.

- Chalam, K.S. *Educational planning : An introduction*. Hyderabad Centre for Educational Studies' Consultancy (c 1985) 83p.

- Committee of Vice-Chancellors and Principals of the Universities of the U.K., London. *Administrative Training Committee. Time Management*. Edinburg, Author, 1982. Discontd.

- _____ *Office organisation and management: The law faculty office*. Edinburg, Author, 1982. Discontd.

- _____ *Improving the filling system*. Edinburg, Author, 1982. Discontd.

- _____ *Right equipment : Selection of office machinery*. Edinburg, Author, 1982. Discontd.

- _____ *Dictation skills*. Edinburg, Author, 1982. Discontd.

- _____ *Question of loyalties*. Edinburg, Author, 1982. Discontd.

- _____ *Grade : Job evaluation game*. Edinburg, Author, 1982. Discontd.

- _____ *Grading dispute*. Edinburg, Author, 1982. Discontd.
- _____ *O & M study at the university of knowingly*. Edinburg, Author, 1982. Discontd.

- _____ *Financial estimating*. Edinburg, Author, 1982. Discontd.

- _____ *Project costing*. Edinburg, Author, 1982. Discontd.

- _____ *University with a wide spread of disciplines*. Edinburg, Author, 1982. Discontd.

- _____ *All change of inverness*. Edinburg, Author, 1982. Discontd.

- _____ *Vice-Chancellor would like a word with you*. Edinburg, Author, 1982. Discontd.

- _____ *Johnson affair*. Edinburg, Author, 1982. Discontd.

- _____ *Statistical techniques and data analysis*. Edinburg, Author, 1982. Discontd.

- India. Ministry of Education. *Analysis of budgeted expenditure on education 1982-83 to 1984-85*. Delhi, Author, 1985. Discontd.

- Indian Council of Agricultural Research, Delhi. *Atlas of agricultural research and training centres*. Delhi, Author, 1984. 60p.

- Jaques, David. *Learning in groups*. London, Croom Helm (c 1984) xiv, 322p.

- Kockelamans, Joseph J., ed. *Interdisciplinarity and higher education*. Pennsylvania, Pennsylvania State University Press, 1979. xiii, 372p.

- Kurien, Christopher Thomas. *Poverty, planning and social transformation*. Bombay, Allied (c 1978) ix, 174p.

- Lakdawala, D.T. *Optimum utilization of educational expenditure in Gujarat*. Ahmedabad, Sardar Patel Institute of Economic and Social Research, 1978. 269p.

- Panikar, J.T., ed. *International cooperation in higher education in science and technology : Perspectives for the 90's*. New Delhi Oxford & IBH (c1985) vi, 355p.

HIMACHAL PRADESH UNIVERSITY

"RECRUITMENT BRANCH"
SHIMLA-171005

ADVERTISEMENT NO. 1/86

Applications are invited on prescribed form) for the following posts so as to reach the **Section Officer, Recruitment Branch, H.P. University, Shimla-171005**, along with a Crossed Indian Postal Order of Rs. 10/- (Rs. 5/- for S.C./S.T.) payable to the Finance Officer by the **10th April, 1986** :

I. PROFESSORS

(Pay Scale : Rs. 1500-2500) in the following subjects of the Post-graduate Centre (Plan posts, likely to continue):
PHYSICS-1 (Spl : Experimental Physics with a strong back-ground of Electronics, Solid State Physics or Material Science);

BOTANY/ZOOLOGY-1 (Spl: Physiology or Bio-Chemistry).

MEDIEVAL INDIAN HISTORY-1

II. READERS: (Pay Scale : Rs. 1200-1900) in the following subjects of the Post-graduate Centre (Plan posts, likely to continue):

STATISTICS-1

PHYSICS-1 (Spl: In any branch of Experimental Physics like X-rays, Crystallography, Spectroscopy or Experimental Solid State Physics);

III. LECTURER

(Pay Scale : Rs. 700-1600) in the following subject of the Post-graduate centre (Plan post, likely to continue):
HISTORY-2

IV. DEAN OF COLLEGES-CUM-DIRECTOR, COLLEGE DEVELOPMENT COUNCIL: (Pay Scale : Rs. 1500-2500) (Tenure post under Plan Scheme)

ESSENTIAL QUALIFICATIONS

I. FOR PROFESSOR

An eminent scholar with published work of high quality actively engaged in research. Ten years' experience of teaching and/or research, experience of guiding research at Doctoral level.

OR

An outstanding scholar with established reputation who has made significant contribution to knowledge.

II. FOR READER

Good academic record with a Doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research or (ii) innovation in teaching methods or (iii) production of teaching materials.

About five years' experience of teaching and/or research provided that at least three of these years were as Lecturer or in an equivalent position. This condition may be relaxed in the case of candidates with outstanding research work.

III. For LECTURER

(a) A Doctorate's degree or research work of an equally high standard; and
(b) Good academic record with at least second class (C in the seven point

scale) Master's degree in the relevant subject from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing inter-disciplinary programmes, the degrees in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctorate's degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record (weightage being given to M.Phil or equivalent degree or research work of quality) may be appointed provided he has done research work for at least two years or has practical experience in a research laboratory/organisation on the condition that he will have to obtain a Doctor's degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increments until he fulfils these requirements.

EXPLANATION

For determining 'Good academic record' the following criteria may be adopted for Lecturers :

- (i) A candidate holding a Ph.D. degree should possess at least a second class Master's degree; or
- (ii) A candidate without a Ph.D. degree should possess a high second class Master's degree and second class in the Bachelor's degree; or
- (iii) A candidate not possessing Ph.D. degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree.

High second class may be determined as the mid point of the starting of the second class and starting of the first class of the University from where he has obtained the degree.

IV. FOR DEAN OF COLLEGES-CUM-DIRECTOR, COLLEGE DEVELOPMENT COUNCIL :

1. (i) Atleast second class Master's degree.
- (ii) A minimum of 10 years' experience in an educational institution, of which atleast 5 years should be administrative experience in a responsible position such as Principal of a Degree College/atleast a Reader or Deputy Registrar in a University/Deputy or Joint Director of Education (College cadre).
2. **DESIRABLE :** (i) Sufficient experience of utilizing development and other University grants available to the

college for Under-graduate as well as Post-graduate studies.

- (ii) Rich experience of guiding, supervising and controlling extra-curricular activities such as N.S.S. N.C.C., Sports, Cultural and other Youth Welfare Activities, etc.
- (iii) Intimate knowledge of managerial, financial and administrative problems of colleges and of relationship between affiliated colleges and an affiliating University.

3. PREFERENCE : Ph.D. degree of an University.

TENURE OF THE POST : The Dean of Colleges-cum-Director, College Development Council shall be appointed for a period of three years. He may be re-appointed for another term of three years but not beyond the age of 60 years. The appointment can also be made by way of deputation basis.

Candidates already in service should send their applications through proper channel. An advance copy, however, may be sent direct.

Candidates called for interview will have to come to the place of the interview at their own expenses and bring with them their original research papers, degrees and certificates, etc. for verification.

The University reserves the right to negotiate with suitable person or persons, if necessary, who may not have applied formally.

The University also reserves the right to fill up or not to fill up the post/posts or to call only selected candidates for interview. The number of posts likely to be filled may vary.

Applications form can be obtained from the Section Officer, Recruitment Branch, H.P. University, Shimla personally on payment of Rs. 2/- or by making a written request to him accompanied by self-addressed envelope of 23x10 cms. with postage stamps affixed worth 0.80 Paise and a postal order of Rs. 2/- drawn in favour of the Finance Officer, H.P. University.

NOTE :

- (i) Applications received on plain paper, not in conformity with the requirements as specified in the application form and received after the due date will not be entertained, and no correspondence will be entertained in this regard.
- (ii) A person applying for more than one post should send a separate application for each post.
- (iii) Those who have already applied for the post/s of Professor in Medieval Indian History against Advt. No. 5/84, dated 27.10.84, Lecturer in History against Advt. No. 2/84, dated 18.5.84 and Reader in Physics and Statistics against Advt. No. 2/85, dated 9.5.1985 need not apply again. However, they may send additional informations, if any.

**A.R. Chauhan
REGISTRAR**

UNIVERSITY OF DELHI

DELHI-110007

No. Estab. IV/105/86

Dated the 27th February, 1986

Applications in the prescribed form are invited for the following posts :—

Sl. No.	Department	Designation
1.	Library & Information Science	(i) One Professor (ii) One Lecturer
2.	Botany	(i) Three Readers (ii) One Lecturer (iii) Two Research Associates
3.	Chemistry	One Professor
4.	Physics & Astrophysics	(i) Two Lecturers in Theoretical Physics (ii) Four Research Associates
5.	Zoology	(i) One Reader (ii)* One Technical Assistant
6.	Economics	Two Professors (Sir Shankar Lal Professor of Mathematical Economics and Professor of Public Economics respectively) One Lecturer
7.	Sociology	(i) One Reader (ii) One Lecturer
8.	Education	Two Research Associates (for S.P. Jain Advanced Centre of Management Studies)
9.	Management Studies	One Reader (Hindustani Instrumental Music)
10.	Music	One Deputy Registrar Two Part-time Specialists (Gynaecologist)—for 3 years (One each for Main Campus and South Campus)
11.	Central Office	* One Urdu Typist
12.	W.U.S. Health Centre	* One Technical Assistant * One Field Attendant * One Senior Mechanic
13.	Urdu	(i)* Two Technical Assistants (One each for UV/VIS Operator and CHN Operator) (ii)* One Workshop Helper
14.	Chinese & Japanese Studies	
15.	Geology	
16.	Computer Centre	
17.	University Services and Instrumentation Centre	

Note : For the post of Professor in Library & Information Science such candidates who had applied earlier for this post in response to our Advt. No. Estab. IV/98/85 dated 9.2.1985 need not apply. However, they may supply additional information if any.

The Scales of the Posts are :

Professor	: Rs. 1500-60-1800-100-2000-125/2-2500
Reader/Deputy Registrar	: Rs. 1200-50-1300-60-1900
Lecturer	: Rs. 700-40-1100-50-1600
Research Associate	A—Rs. 1400/- P.M. fixed B—Rs. 1600/- P.M. fixed C—Rs. 1800/- P.M. fixed D—Rs. 2000/- P.M. fixed
Technical Assistant	: Rs. 425-15-500-EB-15-560-EB-20-700
Senior Mechanic	: Rs. 380-12-500-EB-15-560
Urdu Typist	: Rs. 260-6-290-EB-6-326-8-366-EB-8-390-10-400
Field Attendant	: Rs. 210-4-226-EB-4-250-EB-5-290
Workshop Helper	: Rs. 196-3-220-EB-3-232
Part-time Specialist	: Rs. 600/- P.M. fixed (for visiting the Health Centre 3 times in a week for 2½ hours in each visit)

All posts except those of Research Associates and Part-time specialists carry D.A., C.C.A. and H.R.A. etc. as admissible under the rules in force in the University from time to time.

Essential Qualifications for : Professorship :

An eminent scholar with published work of high quality actively engaged in research. Ten years' experience of teaching and/or research. Experience of guiding research at doctoral level.

Or

An outstanding scholar with established reputation who has made significant contribution to knowledge.

Readership :

Good academic record with at least second class master's degree in relevant subject with a doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research, or (ii) innovation in teaching methods or (iii) production of teaching materials.

Five years' experience of teaching in under-graduate/post-graduate classes and/or post-doctoral research work with evidence of published work.

Note : Second class would mean atleast 50% marks in the subject or equivalent grade.

Lectureship

(other than lectureship in Education)

(a) A Doctorate degree or research work of an equally high standard; and

(b) Good academic record with atleast second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent degree from a Foreign University.

Having regard to the need for

developing interdisciplinary programmes, the degree in (a) and (b) above may be in relevant subjects.

Provided that if the Selection Committee is of the view that the research work of candidate as evident either from his thesis or from his published work is of very high standard, it may relax the requirement of at least second class in Master's degree examination in terms of level achieved at the said examination as prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable, a person possessing good academic record, (weightage being given to M.Phil. or equivalent degree or research work of quality) may be appointed on the condition that he will have to obtain a Doctor's/M.Phil. degree or give evidence of research of high standard within eight years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements.

EXPLANATION

1. For determining "good academic record" the following criteria shall be adopted.

(i) A candidate holding a Ph.D./M.Phil. degree should possess at least a second class Master's degree; or

(ii) A candidate without a Ph.D./M.Phil. degree should possess a high second class Master's degree and second class in the Bachelor's degree; or

(iii) A candidate not possessing Ph.D./M.Phil. degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree.

2. Persons having secured at least 55% or more marks shall be deemed to have passed the examination in the high second class.

LECTURERSHIP IN EDUCATION

(a) A Doctor's degree in education or research work of an equally high standard; and

(b) Good academic record with at least second class (C in the seven point scale) Master's degree in a relevant subject from an Indian University or an equivalent degree from a foreign University.

OR

(a) A Doctor's degree in any university discipline or research work of an equally high standard; and

(b) Good academic record with an M.Phil. degree in Education (which may be acquired while in service) from an Indian University or an equivalent degree from a foreign University.

Having regard to the need for developing interdisciplinary programmes, one of the degrees in (a) and (b) above may be in relevant subjects, the other being in Education.

Provided that if the Selection Committee is of the view that the Research work of a candidate as evident either from his thesis or from his published work is of very

high standard it may relax any of the qualifications prescribed in (b) above.

Provided further that if a candidate possessing a Doctor's degree or equivalent research work is not available or is not considered suitable a person possessing a good academic record (weightage being given to M.Phil. or equivalent degree or research work of quality) may be appointed on the condition that he will have to obtain a Doctor's/M.Phil. degree or give evidence of research work of equivalent high standard within eight years of his appointment failing which he will not be able to earn future increments until he fulfils these requirements.

EXPLANATION

1. For determining "good academic record" the following criteria shall be adopted.

- (i) A candidate holding a Ph.D./M.Phil. degree should possess at least a second class Master's degree; or
- (ii) A candidate without a Ph.D./M.Phil. degree should possess a high second class Master's degree and second class in the Bachelor's degree; or
- (iii) A candidate not possessing Ph.D./M.Phil. degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree.

2. Persons having secured at least 55% marks or more shall be deemed to have passed that examination in the high second class.

RESEARCH ASSOCIATE

Consistently Good academic record with first or high second class (B+) Master's degree or an equivalent Degree of a foreign University in the subject concerned.

Note : Initial appointment will be for a tenure period of 3 years, extendable by another 2 years only. In no case the tenure will extend beyond 5 years in all.

DEPUTY REGISTRAR

- (a) 8 years' experience as Lecturer in a College or a University with experience in educational administration.
- (b) Persons with comparable qualifications in research establishments and other institutions of higher education may also be considered.

Part-Time Specialists (Gynaecologist)

Post-Graduate Degree or equivalent qualification from a recognised Institution with 5 years experience after Post-Graduate Degree. In those disciplines where Post-Graduate Degree holders are not ordinarily available, Post-Graduate Diploma or equivalent qualifications from a recognised Institution with 5 years experience after Post-Graduate Diploma.

Technical Assistant (Zoology)

Graduate in Science. Experience in laboratory techniques of the subject.

Urdu Typist

1. Proficiency in Urdu Typing.
2. Strong Classical background.
3. Should preferably be a B.A. with Urdu literature.

Technical Assistant : (Chinese & Japanese Studies)

Graduate with Science subject.

Field Attendant (Geology):

Robust constitution, competence to walk in hilly terrain for long distance and bear rigorous field life, minimum educational qualification (Middle) Pass.

Senior Mechanic

At least upto eighth standard and about six years experience in operation and maintenance of central Refrigeration.

Technical Assistant (UV/VIS Operator)

At least Second class M.Sc. (Chemistry) having understanding of UV-VIS Spectrophotometer.

OR

Post B.Sc. Diploma in Electronics Science having understanding of analytical instruments with special reference of UV-VIS Spectrophotometer.

Technical Assistant (CHN Operator)

At least Second class M.Sc. (Chemistry) having understanding of CHN Analyser.

OR

Post B.Sc. Diploma in Electronics Science, having understanding of analytical instruments with special reference to CHN Analyser.

Workshop Helper

At least Middle pass & should be able to read and write English and Hindi (There will be an Aptitude Test apart from the Interview).

Special/Desirable Qualifications for :

Research Associate in Physics

Either experimental or theoretical Physics.

Readership in Zoology

Limnology/Animal behaviour

Technical Assistant (Zoology)

Three years experience in Photography, reprography and dark room techniques. Experience in handling various types of Cameras, enlargers and projectors. To expose, develop and print photographs (Electron micrographs, photomicrographs and photographs for scientific publications. Preparation of reprographic material for lectures, demonstrations and thesis. Maintenance of photographic, dark-room & projection equipment. Projection work (cine and still).

Lecturership in Sociology

Specialization in Research methods and statistical and survey techniques.

Readership in Education

Specialization

- (i) Economics of Education
- (ii) Instructional Technology
- (iii) Art Education
- (iv) Experimental Education

Desirable

- (i) B.Ed. or equivalent pedagogical Acquisition
- (ii) M.Ed./M.A. in Education
- (iii) M.A./M.Sc. in Area of Specialization mentioned above.
- (iv) Ph.D. in Education on a topic relevant to the field of specialization.

Lecturership in Education

Specialization : Teaching of History

Research Associate in Management Studies

Demonstrative ability and experience of working in Projects undertaken/to be undertaken by the Faculty.

Readership in Music

Competence in performance with good expertise of Ragas and Compositions and high proficiency in the field.

Part-Time Specialist (Gynaecologist)

Hospital experience after post-graduate degree or diploma.

Technical Assistant

(Chinese & Japanese Studies)

Experience of handling Audio and Video equipments.

Field Attendant (Geology)

Should have some Laboratory experience.

Senior Mechanic

I.T.I. certificate in Refrigeration Plant or should have passed in Refrigeration and electrical wiring course from any reputed firm and knowledge of Electrical Wiring and Central Circuits.

Technical Assistant (UV/VIS Operator)

Some knowledge of the Instrumentation aspects of UV-VIS Spectrophotometer.

Technical Assistant (CHN Operator)

Some knowledge of the Instrumentation aspects of CHN Analyser.

Workshop Helper

Should be able to recognise Workshop Tools and Components.

The prescribed application forms can be had from the Information Section of the University either personally or by sending a self-addressed envelop (size 13 cm x 28 cm) with postage stamps worth Rs. 3.45 p.

The candidates will have to produce the original documents relating to their age, qualifications, experience etc. at the time of interview.

Applications (separate for each post) accompanied by attested copies of Degrees, other certificates, marksheets, published research articles, etc. should be addressed to the Registrar. However, applications for the posts marked asterisk (*) should be sent directly to the Head of the Department concerned. The last date prescribed for receipt of the application is 27.3.1986. However the last date for the posts of Professor in Library Sc. & Reader in Music is 14.3.1986.

Note : (1) It will be open to the University to consider the name of suitable candidates for teaching posts who may not have applied. Relaxation of any of the qualifications may be made in exceptional cases, in respect of all the posts on the recommendations of the Selection Committee. (2) Canvassing in any form by or on behalf of the candidate will disqualify. (3) Candidates for teaching posts only from outside Delhi, when called for interview will be paid to and from second class rail fare. (4) The University reserves the right not to fill up any of the vacancies advertised if the circumstances so warrant.

Madan Mohan
REGISTRAR